THE

INTERNATIONAL SUGAR JOURNAL

A TECHNICAL AND COMMERCIAL PERIODICAL
DEVOTED ENTIRELY TO THE SUGAR INDUSTRY

EDITED BY:
D. LEIGHTON, B.Sc., F.R.I.C
M. G. COPE, M.I.L.
F. N. HOWES, D.Sc., I.S.O.

JANUARY TO DECEMBER
1970

VOLUME LXXII

PUBLISHED AT
23a EASTON STREET
HIGH WYCOMBE
BUCKS.
ENGLAND
1970

PANEL OF REFEREES

A. CARRUTHERS,
Consultant and former Director of Research, British Sugar Corporation Ltd.

F. M. CHAPMAN, Consultant and former Technical Adviser, Tate & Lyle Ltd.

W. R. CRAWFORD, Research and Development Engineer, Walkers Ltd.

K. DOUWES DEKKER,
Consultant and former Director, Sugar Milling Research Institute, Natal, South Africa.

N. J. KING, O.B.E.
Director, Bureau of Sugar Experiment Stations, Brisbane, Queensland, Australia.

O. WIKLUND, Swedish Sugar Corporation.

ERRATA AND CORRIGENDA

Page 28.	Line 29 of column 2.	Read "attributed" for "attribed".
Page 55.	Line 22 of column 1.	Read "macroreticular" for "mactoreticular".
Page 56.	Line 22 of column 1.	Read "1969" for "1961".
Page 82.	Line 24 of column 2.	Read "W. F." for "W. E.".
Page 88.	Line 41 of column 1.	Read "SHCHUPKO" for "SHCHULKO".
Page 120.	Line 14 of column 1.	Read "SCHIWECK" for "SCHIWEK".
Page 141.	Line 27 of column 1.	Read "1969" for "1961".
Page 178.	Line 20 of column 1.	Read "VELAZCO" for "VELASCO".
Page 184.	Line 23 of column 2.	Read "POLLERES" for "POLLIERES".
Page 204.	Line 36 of column 2.	Read "C. G." for "C. H.".
Page 209.	Line 10 of column 2.	Read "herbicides" for "insecticides".
Page 211.	Line 30 of column 1.	Read "J. R." for "H. R.".
Page 213.	Line 7 of column 1.	Read "HOFFMANN-WALBECK" for "HOFFMAN-WALBECK".
Page 335.	Line 24 of column 2.	Read "F. DELGADO F." for "F. D. FONT".
Page 342.	Line 35 of column 1.	Read "K." for "I. K.".
Page 348.	Line 10 of column 1.	Read "PLANTERS" for "PRODUCERS".
Page 374.	Line 7 of column 2.	Read "1" for "2".
Page 374.	Line 11 of column 2.	Read "2" for "1".

MADE AND PRINTED IN ENGLAND
BY
JOHN ROBERTS & SONS
SALFORD
MANCHESTER

INDEX TO VOLUME LXXII

SOME REMARKS ON ITS USE

In using this Index it should be noted that the principal entries cover the several stages of production: CULTIVATION (*see* Beet; Cane; Diseases; Fertilizer; Irrigation; Mechanization; Pests; Soil; Transport; Varieties; Weeds, etc.); SUGAR PROCESSING (*see* Bagasse; Boilers; Boiling; Carbonatation; Centrifugals; Clarification; Crystallization: Diffusion; Evaporators; Filter; Massecuite; Mills; Milling; Molasses; Pans, Vacuum; Scale; Sucrose; Sugar; Sulphitation; Water, etc.); REFINING (*see* Bone Char; Carbon; Refining; etc.); and BY-PRODUCTS (*see* Alcohol; Animal Fodder; By-Products; Fermentation; Paper; Pulp; Yeast, etc.).

Subjects covered separately include Ash; Bulk handling, storage and transport; Colour; Control, Automatic and Chemical; Countries; Ion exchange; Juice; Micro-organisms; pH; Polarization; Weighing, etc. Glucose and Fructose are to be found under Dextrose and Levulose. Obituaries, Statistics and Trade Notices are collected together under those headings. "Sucrose" implies the pure chemical; "Sugar" the commercial product; and "Sugars" the chemical family, rather than grades of sugar. When looking under the author's name, it should be remembered that the surname may be the penultimate in Spanish.

(Abs.) indicates *Abstract*; (Brev.), *Brevity*; (N.B.), *New Books*; (Corr.), *Correspondence*; (F.N.H.), *Dr. Howes*, our Agricultural Editor; (N.C.), *Note and Comment*; (Pat.), *Patent*; (Stat.), *Statistics*; (T.N.), *Trade Notice*.

SUBJECT MATTER

PAGE

Acetic acid production from cane molasses. M. A. Hussain. (Abs.) 121
Aconitic acid recovery from cane molasses. M. S. Doulah and M. Badiuzzaman. (Abs.) 347
Affination. F. M. Chapman. (Abs.) 181
affined sugar decolorization. T. Yamane *et al.* (Abs.) 342
with methanol-acetone containing SO_2. R. Atkinson. (Abs.) 248
Africa: cane pests and diseases. H. Barat. (Abs.) 17
– sugar industries. B. Badinand 177
Albumin: decomposition and coagulation in liming. J. Bartsch. (Abs.) 310
– – – J. Vašátko and A. Dandár 373
effect on beet juice purification. A. D. Golubeva *et al.* (Abs.) 377
– CO_2 hydration in sugar solutions. J. Vašátko *et al.* (Abs.) 283
Alcohol: analysis. 303
distillery in Jamaica. Z. Bacchus and E. Elliot. (Abs.) 185
– heat transfer. N. Y. Tobilevich *et al.* (Abs.) 184
– plant. (T.N.) 350
production from beet molasses, use of antiseptic. T. P. Siyusarenko and E. P. Vitukevich. (Abs.) 347
– cane juice. O. Valsechi. (Abs.) 92
– – molasses. R. A. Cruz. (Abs.) 315
– – – A. E. de Erézcano do P. *et al.* (Abs.) 379
– – – irradiation effect. H. Iizuka *et al.* (Abs.) 379
– chemical control. T. Göçmençelebi 154
see also By-products; Distillery; Fermentation *and* Rum
Algeria beet agriculture. Anon. (Abs.) 337
American Factors Associates: Indonesian sugar project. (Brev.) 192
Amino-acids: beet yellows infection. J. M. Fife. (Abs.) 276
cane molasses browning polymers. W. W. Binkley 5
colour formation in sugar solution. A. R. Sapronov *et al.* (Abs.) 183
determination in cane molasses. M. L. Rodriguez. (Abs.) 377
reaction with glucose and fructose. K. J. Parker. (Abs.) 184
separation from distillery waste. K. A. Prabhu and R. M. Maithani 120
sucrose decomposition. Z. A. Mil'kova *et al.* (Abs.) 216
see also Betaine; Glutamic acid *and* Nitrogen
Angola *see* Portuguese West Africa
Animal fodder: bagasse. P. F. Randel *et al.* (Abs.) 315
– fibre biodegradation. R. E. Druilhet *et al.* (Abs.) 154, 379
beet pulp and molasses. S. C. Gupta *et al.* (Abs.) 117
– – – pellets decomposition in storage. J. D. Jorgensen and R. Gaddie. (Abs.) 347
– – treatment. Beloit Corp. (Pat.) 220
– – – L. M. Koelsch. (Pat.) 187

PAGE

Animal fodder:
beet pulp-urea-phosphate-molasses. O. Boeger. (Abs.) 121
– sugar factory and distillery products. V. Henry. (Abs.) 121
calcium diphosphate from carbonatation mud. S. T. Dexter *et al.* 154
cane molasses. A. Elias *et al.* (Abs.) 92
– – N. A. Macleod *et al.* (Abs.) 218
– – J. L. Martin *et al.* (Abs.) 92, 185
– – N. M. Pandit and S. N. Singh 347
– – R. Perez. (Abs.) 315
– – T. R. Preston and M. B. Willis 284
– – T. R. Preston *et al.* (Abs.) 284
– – J. Resende P. (Abs.) 92
– – meal biological treatment. R. Roth. (Abs.) 154
distillery waste. (Brev.) 192
mixers. (T.N.) 62
molasses-urea mixture. (T.N.) 222
– and vinasse. Lesaffre et Cie. 349
protein production from bagasse and beet pulp 304
sucrose phosphate salt. J. Gagolski and B. M. Smythe. (Pat.) 220
sugar and cane molasses. R. Perez *et al.* (Abs.) 121
– molasses-glucose mixture. N. P. Bray. (Pat.) 59
– for pigs. Anon. (Abs.) 91
yeast production. L. Delvaux. (Abs.) 91
– – from distillery waste. O. Almazán. (Abs.) 379
– – molasses. Y. Akyüz. (Abs.) 154
– – P. Birolaud. (Abs.) 154
Areado sugar manufacture. J. Cunha da Silveira. (Abs.) 150
Argentina: automatic centrifugal order 94
cane breeding. J. A. Mariotti. (Abs.) 306
– growth and ripening. Anon. 17
– varieties. R. F. de Ullivarri and G. Kenning V. (Abs.) 275
chemical weed control. E. A. Cerrizuela. (Abs.) 207
sodium glutamate factory. (Brev.) 64
sugar industry productivity. V. Hemsy. (Abs.) 85
– – state intervention. (Brev.) 320
– production 1969/70. (Brev.) 32, 96
– – target 1970. (Brev.) 191
– smuggling. (Brev.) 96
Ash: beet juice electrodialysis. K. Čížek and V. Čejková. (Abs.) 212
– molasses electrodialysis. I. M. Litvak *et al.* (Abs.) 179
calcium and magnesium determination in beet molasses. I. Herineanu *et al.* (Abs.) 251
– – – yeasts. J. R. Biart and H. Pérez. (Abs.) 377
– reduction in cane juice. J. Casey 210
– salts determination in beet juice. V. V. Ziaman. (Abs.) 377
conductivity measurement of KCl-sucrose solutions. F. Schneider *et al.* (Abs.) 251
Iron determination in beet juice. G. Forster. (Abs.) 313
– – – W. Wruss. (Abs.) 314

PAGE

Ash:
lead and copper determination in white sugar. W. Mauch *et al.* (Abs.) 241
metals determination in beet. G. W. Maag. (Abs.) 251
reduction in sucrose crystals. R. P. Jennings. (Abs.) 90
in refined and white sugar. S. Hase *et al.* (Abs.) 346
removal by ion exchange. P. Devillers and M. Loilier. (Abs.) 180
– – – J. F. Zievers and C. J. Novotny. (Abs.) 181
– – – and boiling efficiency. E. Felber. (Abs.) 179
sodium in beet molasses. P. H. Miller. (Abs.) 378
– potassion and calcium determination in cane molasses. R. Singh 120
trace elements determination in juice, molasses and white sugar. T. D. Carpenter and S. E. Bichsel. (Abs.) 345
– – – white sugar. A. A. Gerasimenko *et al.* (Abs.) 282
Australia: army worm cane pests. B. E. Hitchcock. (Abs.) 336
bagasse utilization investigation 128
cane burning. Anon. (Abs.) 175
– damage by wild pigs. C. M. McAleese. (Abs.) 16
– disease control. C. G. Hughes 141
– grub. R. M. Bull. (Abs.) 366
– haulage. Anon. (Abs.) 336
– irrigation. Anon. (Abs.) 140, 141
– juice sampling. (Brev.) 96
– land grading for drainage. Anon. 305
– mechanical harvesting. Anon. 175
– – – L. G. Vallance. (Abs.) 173
– mosaic. Anon. (Abs.) 141
– – and maize dwarf mosaic viruses. R. D. Pares. (Abs.) 80
– pest control. S. Greenaway. (Abs.) 47
– sampling at Millaquin. J. D. Malan. (Abs.) 57
– train locomotive performance. C. R. Murry and R. A. James 52
– – rolling stock utilization. C. R. Murry and E. E. Shepherd 52
– transport scheduling. G. Heritage *et al.* (Abs.) 52, 205
– varieties. I. T. Freshwater. (Abs.) 142
chemical weed control. C. van der Schans. (Abs.) 241
Colonial Sugar Refining Co. Ltd. raw sugar manufacture. (N.B.) 312
– – – report 1970. (N.C.) 258
distillery waste as animal fodder 192
drought. Anon. (Abs.) 204
– and ratoon stunting disease. Anon. (Abs.) 273
– – – D. R. L. Steindl. (Abs.) 142
evaporator condenser performances. P. N. Stewart and T. C. Mulvena 21
fertilizer advisory service. O. W. Sturgess. (Abs.) 205
Fiji disease control. C. G. Hughes 205
– – – A. W. Osborn. (Abs.) 81
– and ratoon stunting diseases. C. G. Hughes. (Abs.) 204
– – – L. G. W. Tilley. (Abs.) 17

INDEX

PAGE

Australia:
Habana oat grass control L. S. Chapman. (Abs.) 141
– – – L. G. W. Tilley. (Abs.)..... 17
leaf scald. Anon. (Abs.)..... 109
– – C. G. Story. (Abs.)..... 46
mixed legume cover crop. L. K. Izatt. (Abs.)..... 336
mobile data logging laboratory. Anon. (Abs.)..... 120
moth borer. A. Macqueen. (Abs.) 142
nitrogen fertilizers. N. J. King. (Abs.) 141
– – trials. J. Wright. (Abs.)..... 16
rat control. Anon. (Abs.)..... 275
– – R. Barringham. (Abs.)..... 47
ratoon stunting disease. B. T. Egan 336
red rot. B. T. Egan. (Abs.)..... 47
soldier fly control. Anon. (Abs.).. 175
sugar factory laboratory manual. Anon. (N.B.)..... 182
– – research. Anon. (Abs.)..... 243
– industry literary award. (Brev.) 78
– production 1969. (N.C.)..... 65
– year book 1970. Anon. (N.B.).. 249
waste water treatment investigation 128
water catchment areas. Anon. (Abs.) 335
weeds. J. Anderson. (Abs.) 336
– chemical control. L. S. Chapman 47
wild sorghum. J. F. Usher. (Abs.) 142
Austria beet campaign results 1969/70 256
– seed germination. H. Bronner .. 113
– – production. H. Isák. (Abs.).. 18

Bagacillo pressing. M. M. Rodriguez 146
Bagasse: active carbon production. J. Gayol. (Abs.) 379
– – – B. Kudriashov. (Abs.)..... 379
animal fodder. P. F. Randel *et al.* 315
bagasse-cement building material.. 288
biodegradation. R. E. Druilhet *et al.* 154, 379
– T. Macdonald. (Abs.) 91
board, Brazil project. (Brev.)..... 383
– heat treatment. M. C. Chao (Abs.) 91
– manufacture. W. J. Nolan. (Abs.) 29
– – cane treatment. R. B. Miller and T W. Raczuk. (Pat.) .. 188
– – – R. B. Miller *et al.* (Pat.).... 188
– – in Mauritius. (Brev.)..... 382
– – in Pakistan. R. Hesch and H. Frers. (Abs.) 121, 218
– – and properties. M. F. Gloria 315
– – in Réunion. R. Hesch. (Abs.) 121
– – Taiwan. C. S. L. Chiu. (Abs.) 91
– – – H. C. Tao. (Abs.)..... 91
– – Trinidad plans. (Brev.)..... 352
– – Venezuela. Anon. (Abs.).... 284
carbonization. M. F. Leonor. (Pat.) 122
cellulose plant in Réunion. (Brev.) 63
composition and uses. O. Valsechi 92
diffusion. P. Neuville..... 164
fertilizer. Anon. (Abs.)..... 109
furfural production. J. Lodos. (Abs.) 29
handling and storage. J. H. Payne 177, 309
heat economy and paper manufacture. K. R. Pundir. (Abs.).. 338
hemicellulose hydrolysis. L. Nobile 317
lignin determination. Anon. (Abs.) 57
pre-pressing after cane diffusion. Braunschweigische Maschinenbauanstalt. (Pat.)..... 59
press. Maschinenfabrik Buckau R. Wolf AG. (Pat.) 349
– J. Farmer. (Pat.)..... 122
– Rose, Downs & Thompson Ltd. 156
– operation. H. B. Moser. (Abs.).. 114
pressing. French Oil Mill Machinery Co. (Pat.) 60
protein production 304
– – C. E. Dunlap and C. D. Callihan 218
treatment to prevent bagassosis.. 223
utilization. V. T. Xuan and R. Samaniego. (Abs.) 315
– in Barbados. (Brev.)..... 128
– investigation in Australia. (Brev.) 128
see also Furnaces; Paper *and* Pulp
Bagging equipment. (T.N.) 62
Bahamas cane agriculture. F. Delgado. (Abs.) 239
Barbados bagasse utilization. (Brev.) 128
moth borer control. (Brev.)..... 256
new cane variety. (Brev.)..... 128
sugar industry rationalization.... 96, 354
Bearing pressures in cane mills. P. P. Seth. (Abs.)..... 115
Beet: agriculture in Algeria. Anon. 337
– Holland. C. F. Roosenschoon.. 23
– Hungary. L. Nagy. (Abs.)..... 279
– India. P. S. Gill. (Abs.)..... 276
– – S. C. Sharma. (Abs.)..... 209

PAGE

Beet:
agriculture and labour reduction. Anon. (Abs.) 143
– in UK. G. Parkinson. (Abs.).. 19
– US. V. W. Baird. (Abs.)..... 209
– – B. E. Easton. (Abs.)..... 82
– without singling. O. Neeb. (N.B.) 26
amino nitrogen determination. N. Kubadinow and L. Wieninger.. 313
– – – L. Wieninger. (Abs.)..... 313
breeding. E. Bornscheuer. (Abs.) 176
– male sterility. H. A. Cortessi. (Abs.) 19
– – – transmission. G. J. Curtis 19
– electronic data processing. W. Haufe. (Abs.)..... 50
– in France. H. Laby *et al.* (Abs.) 50
– research in Poland. M. Jassem 82
– for resistance to *Cercospora*. T. Bilgen *et al.* (Abs.)..... 369
– – fungal diseases. G. E. Russell.. 242
– – *Rhizoctonia* root rot. M. M. Afanasiev and D. E. Baldridge 112
– – – J. O. Gaskill. (Abs.) 112
– – yellows in US. J. S. McFarlane *et al.* (Abs.) 307
– root selection. J. O. Gaskill. (Abs.) 144
campaign length optimization. A. Huculak. (Abs.)..... 148
– – – E. F. Kazakov. (Abs.)..... 247
– – – N. V. Kheize *et al.* (Abs.) 247
– – – G. Oplatka. (Abs.) 374
– – – S. I. Podgaets *et al.* (Abs.).. 341
– – – and sugar factory capacity in USSR. M. S. Sabanskii and M. P. Primak. (Abs.).... 341
cleaner. J. de Jonge. (Pat.)..... 380
– roll screen. Ogden Iron Works Co. 349
– – – J. M. Silver. (Pat.)..... 186
conveyor. N. A. Emel'yanov *et al.*... 55
cossette dimensions, effect of temperature and sugar extraction. V. M. Lysyanskii and N. S. Karpovich. (Abs.)..... 247
– scalders. F. Schneider *et al.* (Abs.) 213
– slicer. S. A. de Fonderies et Ateliers L. Choquenet. (Pat.)..... 93
– – H. C. Radinger. (Pat.)..... 220
– – P. Wigand. (Abs.)..... 148
– – knives in USSR. V. N. Shchegolev. (Abs.)..... 341
effect of treatment for *Cercospora* leaf spot. G. C. Lucci and G. Mantovani. (Abs.) 90
flume stone catchers. S. Vermes .. 54
healing of damaged tissue. E. Swietlicka. (Abs.)..... 51
– – – V. Z. Zhadan *et al.* (Abs.).... 87
hopper discharge. V. A. Novikov *et al.* (Abs.)..... 246
lipids. U. Beiss. (Abs.)..... 313
insecticide residues. L. van Steyvoort *et al.* (Abs.)..... 337
mechanical handling. J. Ponant... 214
metals and nitrogen determination. G. W. Maag. (Abs.) 251
micro-organisms. F. Schneider. (Abs.) 117
– F. Schneider *et al.* (Abs.)..... 184
morphology, effect of virus yellows. R. Hull. (Abs.)..... 144
optically-active matter determination. A. Y. Zagorul'ko and A. A. Ponomarenko. (Abs.) 153
petiole nitrate nitrogen determination. R. D. Miller. (Abs.) 378
pilers. (T.N.) 62
– L. Jurewicz. (Abs.)..... 118
– J. Strzerzysz. (Abs.)..... 340
processing with cane. K. H. Parekh and C. J. Mahta. (Abs.) 116
– effect of downy mildew. J. Zdárský 152
– in January. B. Gostańska. (Abs.) 214
– low-grade roots. A. D. Golubeva *et al.* (Abs.) 246
rasp. A. Dandár *et al.* (Abs.)..... 152
research in UK. (N.C.)..... 161
sample cleaner. N. E. Carver and J. M. Silver. (Pat.) 124
sampling. P. Devillers and S. Tourlière. (Abs.)..... 117
– and dirt content determination. L. M. Laskutova and E. V. Panferova. (Abs.)..... 27
– topping and analysis. J. Jorritsma and J. F. T. Oldfield. (Abs.) .. 346
saponin. D. Steganović *et al.* (Abs.) 27
seed dressing and herbicide application, effect on yield. W. R. Schäufele and C. Winner. (Abs.)..... 83
– emergence and growth, effect of covering. A. von Müller and C. Winner. (Abs.) 19

PAGE

Beet:
seed growing. R. Hull and R. K. Scott 51
– – H. Isák. (Abs.)..... 143
– pelleting. R. Schildbach. (Abs.).. 50
– planting date trials in US. W. J. Russel. (Abs.) 144
– – density and germination. H. Bronner. (Abs.)..... 113
– – – and yield. O. Neeb and C. Winner. (Abs.) 83
– – for mechanization. F. B. Russell 18
– – and soil fumigation for nematode control. R. C. Johnson. (Abs.) 337
– – and virus yellows spread. G. D. Heathcote. (Abs.)..... 369
– polishing. A. Zakhariev *et al.*..... 51
– production in Austria. H. Isák.. 18
– size and yield. I. A. Yakimenko.. 209
– sowing in US. H. F. Mayland and J. W. Cary. (Abs.) 51
– spacing trials in USSR.. A. V. Dobrotvortseva. (Abs.) 50
seedling rhizosphere bacterial formation. P. Gyurko. (Abs.) 51
– transplantation. Anon. (Abs.).... 242
– – R. R. Panje and P. S. Gill. (Abs.) 209
self-fertilization control. I. O. Skoyen 369
sucrose content and factory heat economy. P. Freund. (Abs.).... 117
– – juice osmolality. A. E. Goodban and R. M. McCready. (Abs.) 89
– determination. W. Mauch. (Abs.) 378
– – H. Neumann. (Abs.)..... 27
– distribution. M. Ebata. (Abs.).. 346
– increasing. E. I. Du Pont de Nemours & Co. (Pat.)..... 219
– translocation. P. Trip. (Abs.).. 143
– – effect of light. D. Habeshaw.. 51
sugar factory products as animal fodder. V. Henry. (Abs.)..... 121
– manufacture. L. M. Koelsch. (Pat.) 317
– – in India. S. C. Gupta *et al.* (Abs.) 117
– – – V. S. Sud. (Abs.) 19, 179
sugars synthesis and movement. V. D. Sakalo and I. G. Vijval'ko.... 113
tarehouse laboratories in US. C. L. Schmalz *et al.* (Abs.)..... 282
– process and equipment. M. Frimi and K. Toninger. (Abs.)..... 27
tetraploidy induction tests. H. Savitsky. (Abs.)..... 83
thinning. M. Dambroth. (Abs.).... 369
topping. V. A. Buida. (Abs.)..... 213
– effect of harvester speed. J. A. Wayman and G. L. Maughan.. 242
– – on quality. L. Wieninger and N. Kubadinow. (Abs.)..... 310
triploid seed production. H. Amand *et al.* (Abs.)..... 18
water separators. N. M. Datsenko *et al.* (Abs.)..... 213
weighing. A. A. Rozinskii and V. I. Kostyuk. (Abs.) 87
wilting control R. A. Kohl and J. W. Cary. (Abs.) 369
yard layout. (T.N.) 62
yield, effect of fertilizer and irrigation. L. Hájek. (Abs.) 51
– – – E. von Boguslawski and R. Schildbach. (Abs.)..... 51
– – nematicide application to soil. E. C. Jorgenson. (Abs.) 242
– – nitrogen dosage. E. C. Varsa.. 113
– – preceding crops. R. Litvinyuk 113
– – simulated hail injury. O. Neeb and C. Winner. (Abs.)..... 307
– – soil. A. K. Swenerton. (Abs.).. 113
– – – conditioning. E. F. Bolton and J. W. Aylesworth.... 18
– – – liming. G. Schmid. (Abs.).. 83
see also Animal fodder; Diffusers; Diffusion; Diseases; Factory; Glutamic acid; Juice; Juice, Beet; Mechanization; Molasses; Molasses, Beet; Payment; Pectins; Pests; Pulp; Saponin; Storage; Varieties *and* Water, Waste
Belgium: beet growth, pests and diseases. Anon. (Abs.)..... 337
– varietal trials. N. Roussel and R. van Stallen. (Abs.) 83
– thick juice storage. R. Hurasky 371
Betaine: beet molasses content. E. A. Grivtseva *et al.* (Abs.) 153
– – – P. H. Miller. (Abs.)..... 378
iron corrosion. W. Braunsteiner.... 314
loss reduction in green syrup ion exchange treatment. K. P. Zakharov *et al.* (Abs.) 92
recovery from beet molasses. I. P. Chernikova. (Abs.) 185

INDEX

PAGE

Boilers. (T.N.) 254
automatic control. N. Magasiner.. 84
corrosion prevention. M. L. Polyak *et al.* (Abs.) 213
deposit prevention. (T.N.) 61
scale removal. J. W. Callahan. (Pat.) 186
– – K. K. Menon. (Abs.)..... 308
see also Power; Steam *and* Water

Boiling. I. N. Akindinov. (Abs.)..... 341
F. M. Chapman 76, 103, 375
S. G. Gupte. (Abs.) 309
D. P. Kulkarni. (Abs.)..... 309
J. Soltysiak *et al.* (Abs.) 214
W. Szokol. (Abs.)..... 314
automatic control. (T.N.) 62, 221
– – J. de Cremoux. (Abs.)..... 280
– – H. Hartl and K. Wellenhofer.. 86
– – S. Honda. (Abs.) 342
– – R. N. Johnson. (Abs.)..... 21
– – A. Joseph. (Abs.)..... 85
– – M. de Marbaix *et al.* (Abs.)..... 214
– – J. J. Quintero. (Abs.) 210
– – H. Thiele and A. Langen. (Abs.) 23
– – J. G. Ziegler. (Abs.)..... 114
bold grain. M. Y. Lonkar and A. D. Pathak. (Abs.) 309
conglomeration reduction. A. M. Howes *et al.* (Abs.) 375
continuous. (T.N) 221, 286
– G. W. Luce 131, 170
– S. I. Sirenko *et al.* (Abs.)..... 373
heat transfer calculation. N. A. Shevandin. (Abs.)..... 246
instruments. V. D. Diwan. (Abs.).. 309
ion exchange treatment effect. E. Felber. (Abs.) 179
massecuite apparent crystal volume. R. N. Agarwal. (Abs.) 115
– constant level. A. R. Grandadam 279, 341
– exhaustion. P. Guerrier. (Abs.).. 373
– graining. Y. K. Athawale. (Abs.) 309
– – T. R. Ray. (Abs.)..... 20
– temperature distribution. V. P. Troino. (Abs.) 149
– – – V. P. Troino and M. L. Vaisman. (Abs.)..... 150
molasses formation. J. C. González M. (Abs.) 309
needle-shaped crystal formation. M. Kamoda *et al.* (Abs.)..... 376
optimum conditions for final strike. J. R. Ariosa M. (Abs.)..... 211
refinery low grade recovery. F. M. Chapman 7
– scheme. L. Ruciński and T. Drozdowski. (Abs.) 343
seed slurry preparation. S. C. Gupta and S. K. D. Agarwal. (Abs.)..... 20
seeding. 304
– G. Alemán. (Abs.)..... 244
– T. R. Ray Inc. (Abs.) 277
– D. M. Stevenson. (Abs.) 21
sucrose decomposition. L. I. Trebin *et al.* (Abs.)..... 153
surface-active agent addition..... 304
– – – Anon. (Abs.)..... 178
– – – J. R. Gomeri and A. M. Alcala 244
– – – C. M. Madrazo. (Abs.)..... 178
– – – H. L. Sanders. (Pat.) 316
– – – K. A. Shah *et al.* (Abs.)..... 308
– – – D. Tanco. (Abs.) 178
syrup electrodialysis effect. A. P. Kozyavkin *et al.* (Abs.)..... 179
thermograms. A. V. Zubchenko *et al.* 250
three-massecuite schemes. J. A. Clark G. and F. García L. (Abs.) 339
– – – P. Simon and O. Krieger.... 87
time, effect of non-sugars and colorants. S. Zagrodzki. (Abs.)..... 280
two-massecuite system. M. P. Primak. (Abs.)..... 179
– and two-and-a-half massecuite systems. M. K. Patil. (Abs.).. 309
vacuum effect. R. Singh *et al.* (Abs.) 116
– level and pan design. J. de Cremoux. (Abs.)..... 245
see also Crystallization; Massecuite *and* Pans, Vacuum

Bolivia sugar production target 1970 384
Bone char: colorants. L. Farber *et al.* 216
column pressure drop. S. Kudo and K. Amako. (Abs.)..... 24
dust control. B. A. Stephens (Abs.) 248
vs. granular carbon in refining. A. M. Moult. (Abs.)..... 375
physical properties. M. C. Bennett 215
– – G. W. Muller. (Abs.) 215
revivification kiln. Y. Oyama. (Abs.) 342
in sugar refining. V. Valter. (N.B.) 344
UK manufacturer. (Brev.)..... 254

PAGE

Booker McConnell Ltd. report 1969.. 258
Brazil: bagasse board project. (Brev.) 383
bulk sugar terminal. (Brev.)..... 191
cane growth and weed competition. G. M. Azzi *et al.* (Abs.)..... 45
– leaf froghopper control. P. Guagliumi (Abs.) 141, 367
– varieties. L. P. Velloso. (Abs.).. 366
– worker instruction. M. de Azevedo . P. (Abs.)..... 367
chemical weed control. H. de Oliveira and J. C. Ometto. (Abs.)..... 273
DDS cane diffusion. J. B. Karlsson 40
flood damage. (Brev.) 320
sugar data. (Stat.) 223
– exports 1969. (Brev.) 95
– plan 1970/71. (Brev.) 255
British Commonwealth Sugar Agreement: Jamaica sugar price reduction. (Brev.) 384
– – – and UK membership of EEC ..255, 322
British Sugar Corporation Ltd.: incentive agreement. (N.C.)..... 354
report 1968/69. (N.C.) 97
sugar factory rationalization. (N.C.) 89
20th Technical Conference 1970..... 237
Brix: automatic control. J. J. Quintero 338
– – in evaporator. M. Bosnjak.... 235
– – – R. de la Torre. (Abs.) 150
beet juice measurement and control. W. Grasmann and O. Parisek.... 148
cane juice relationships in milling. J. J. Gómez. (Abs.) 183
evaporator heat transfer. J. Závorka *et al.* (Abs.)..... 211
massecuite calculation. T. P. Khvalkovskii. (Abs.) 372
measurement. Hawaiian Development Co. (Pat.)..... 93
sugar solution thermal stability. L. I. Trebin *et al.* (Abs.) 183
see also Density
Brown sugar production. American Sugar Co. (Pat.)..... 125
Bulgaria experimental carbonatation unit. K. I. Michev and I. F. Bugaenko. (Abs.)..... 55
Bulk handling. Mitsubishi Jukogyo K. K. (Pat.)..... 155
Tsentralnoe Proektna-Konstruktorskoe Bjuro. (Pat.)..... 219
beet and sugar. J. Ponant. (Abs.).. 214
Brazil terminal. (Brev.) 191
cane. E. M. Hahn. (Abs.)..... 339
– A. Kirstein and P. A. Carreno ..20, 46
– G. R. Timmons. (Abs.) 366
– in Puerto Rico. C. V. Rodriguez 208
Durban terminal conveyor system. A. M. Guthrie and J. R. Pilcher.. 84
equipment. (T.N.)..... 62
Mauritius study. (Brev.)..... 383
in Philippines. L. Ymson. (Abs.).. 211
see also Conveyors
Bulk storage. W. Weilandt. (Abs.).. 311
beet pulp-molasses pellets decomposition. J. D. Jorgensen and R. Gaddie. (Abs.) 347
bins. (T.N.)..... 222
raw sugar in US. A. Acosta. (Abs.) 211
– – warehouse. Anon. (Abs.) 281
refined sugar silo. E. C. Tubb. (Abs.) 150
silo. A-B-R Ateliers Belges Réunis in USSR. I. S. Chupak and L. A. Rozental'. (Abs.) 87
– M. Sabanskii and A. Rogachev.. 343
white sugar. D. S. Shevtsov *et al.*.. 22
– – bound moisture. L. K. Sereda 148
Bulk transport. (T.N.)..... 222
pneumatic transport international conference. (Brev.)..... 383
raw sugar ship loading and discharge. Mitsubishi Jukogyo K. K. (Pat.).. 155
– – – Tsentralnoe Proektna-Konstruktorskoe Bjuro. (Pat.) 219
– – shipping investigation. (Brev.) 64
sugar in USSR. I. S. Chupak and L. A. Rozental'. (Abs.)..... 87
– – M. Sabanskii and A. Rogachev 343
white sugar in France. (Brev.).... 350
By-products: cane. J. M. Paturau.... 25
– O. Valsechi. (Abs.) 92
– juice. A. Diokno. (Abs.)..... 315
– molasses. R. A. Cruz. (Abs.).... 315
sucrose research. J. L. Hickson..... 218
synthetic rubber study in Peru.... 96
utilization. C. R. Bonati. (Abs.) .. 29
– for animal fodder. V. Henry. (Abs.) 121
– research. Anon. (N.B.) 249
– in Taiwan. H. S. Wu. (Abs.)..... 121
see also individual By-products

PAGE

Calcium, *see* Ash *and* Lime
Cambodia sugar factory proposal. 128
Canada: beet sugar production 1969/70 191
chemical weed control. R. A. Fogg and W. F. Meggitt. (Abs.)..... 82
refinery automatic boiling control. 221
sugar imports. (Stat.) 192
Cane: agriculture in India. V. S. Bhide 16, 79
– – S. C. Sharma. (Abs.) 177
– – W. S. Warrier. (Abs.) 244
– Mexico. A. González G. (Abs.).. 111
– – D. Ontiveros H. (Abs.)..... 275
– – B. Ortiz V. (Abs.)..... 141
– planning. C. H. O. Pearson. (Abs.) 49
– in South Africa. K. Dymond.... 49
– – – J. L. du Toit and M. G. Murdoch. (Abs.) 48
– Taiwan. P. Y. Ho. (Abs.) 109
– technical assistance programme in Philippines. D. K. Ballinger.. 240
– in US and Bahamas. F. Delgado. 239
breeding. N. J. King. (Abs.) 205
– in Argentina. J. A. Mariotti. (Abs.) 306
– forked root-hairs significance. R. Narisimhan and B. V. Natarajan 45
– hybridization with wild cane in US. P. H. Dunckelman and R. D. Breaux..... 43
– – – L. L. Lauden. (Abs.) 15
– for mosaic resistance. P. H. Dunckelman and R. D. Breaux 275
– in Philippines. J. N. Gibe and F. Y. Panol. (Abs.) 240
– Réunion. Anon. (Abs.)..... 142
– seed setting in Pakistan. S. D. Fasihi and S. Ahmad. (Abs.).. 141
– in US. R. D. Breaux and P. H. Dunckelman. (Abs.)..... 207
– – P. H. Dunckelman and R. D. Breaux. (Abs.) 140
– – N. I. James. (Abs.) 207
– – L. L. Lauden. (Abs.)..... 368
bulk handling. E. M. Hahn. (Abs.) 339
– – A. Kirstein and P. A. Carreno 20, 46
– – G. R. Timmons. (Abs.) 366
– – in Puerto Rico. C. V. Rodriguez 208
burning in Australia. Anon. (Abs.) 175
– and sucrose losses. G. Samuels and A. Cayere. (Abs.) 239
cleaning. J. E. Clayton and H. D. Whittemore. (Abs.) 110
crop-logging. S. V. Parthasarathy *et al.* (Abs.)..... 206
clone cytology in Fiji. S. Price and J. Daniels. (Abs.)..... 14
damage by lightning. Anon. (Abs.) 81
deterioration control. R. P. Vickers and L. P. Schafer. (Abs.)..... 47
– after harvesting 304
– – Anon. (Abs.) 16
– – B. T. Egan..... 142, 205
– – – D. H. Foster. (Abs.).....21, 141
– – – A. P. Gupta *et al.* (Abs.).... 111
– – – M. Pineda L. (Abs.)..... 306
– – – A. Velasco P. and A. Rueda R. (Abs.)..... 178
– – – loss determination. S. M. Rodriguez S. (Abs.)..... 211
– – – polysaccharide hydrolysis. J. Bruijn. 195
– index calculation. G. R. Serbia.. 183
disintegrator. J. C. V. Ducasse. (Pat.) 381
dry-cleaner. (T.N.)..... 285
– Ministerio de la Industria Azucarera. (Pat.) 156
– R. A. Ponce de León. (Abs.) 243
– in Cuba. A. F. Betancourt. (Abs.) 114
enzyme activity, effects of 6-azauracil and nitrate. A. G. Alexander.... 45
– behaviour after desiccation. A. G. Alexander and R. Montalvo Z. 367
– studies..... 272
farm management. Anon. (Abs.).... 109
fibre determination. L. P. Hebert and N. I. James. (Abs.) 215
– – N. D. Stevenson *et al.* 70
– – P. N. Stewart. (Abs.)..... 57
flowering. C. G. Story. (Abs.)..... 336
– control. A. C. Arvier. (Abs.).... 45, 47
– – J. E. Barnes. (Abs.)..... 46
– – I. A. Brown and G. M. Chambers 142
– – G. M. Chambers. (Abs.) 173
– effects of phosphate, irrigation and light. A. M. Malukara and N. D. Yusuf. (Abs.)..... 275
– – weather. T. Chu and J. L. Serapion. (Abs.) 367
frost damage. J. E. Irvine. (Abs.).. 305
– resistance determination. J. E. Irvine. (Abs.)..... 45

INDEX

PAGE

Cane: growth light relationship. W. Muhammad and N. D. Yusuf. 274
– regulators. E. I. Du Pont de Nemours & Co. (Pat.) 125, 219
– – D. W. Fewkes. (Abs.) 205
– – Monsanto Co. (Pat.)..... 220
– – K. Sookashthan and M. S. S. Rao. (Abs.) 173
– and ripening in Tucumán. Anon. 17
– soil drainage. Anon. (Abs.)..... 175
– – moisture. T. R. Srinivasan and Mariakulandai. (Abs.)..... 206
harvesting difficulties in Puerto Rico 32
hilling-up. Y. J. Hsia. (Abs.)..... 306
intercropping with groundnuts. K. K. P. Rao and M. Rao. (Abs.).... 206
– in India. P. S. Gill. (Abs.) 175
internode formation. C. Ekambaram 14
morphology, anatomy and chemical composition. O. Valsechi. (Abs.) 92
non-sugar and molasses formation. J. C. González M. (Abs.) 217
nutrient deficiency and drought resistance. K. N. Lal *et al.* (Abs.).. 14
physiology. G. Samuels. (Abs.).... 174
physiological and biochemical research. A. J. Vlitos. (Abs.) 174
– – – A. J. Vlitos and D. W. Fewkes 207
photosynthesis. 272
plant establishment in peat pots. L. Lindsay. (Abs.)..... 274
planting. L. L. Lauden. (Abs.)..... 274
– rate and yield. A. Nath and J. Bajaj. (Abs.) 336
– time and borer incidence. M. M. I. Khan and C. K. Muhammad .. 274
– – rate and yield. R. S. Chen and C. C. Tse. (Abs.) 46
– trials with immature seed. B. C. Mathur and A. Singh. (Abs.).. 110
– – in India. R. R. Panje *et al.* (Abs.) 273
ratooning tests in Pakistan. M. I. Khan *et al.* (Abs.) 142
research in Mauritius. (F.N.H.).... 138
– station in Pakistan. (Brev.)..... 288
– in UK 270
ripening. R. A. Yates. (Abs.)..... 174
– research 270
root behaviour. J. Glover. (Abs.).. 48
– C:N ratio and soil nitrogen availability. R. A. Wood. (Abs.).. 49
rotation with pineapple. L. W. Huei and T. Y. Jeih. (Abs.) 306
– Pongola grass in Jamaica. T. Chinloy and B. M. Hogg. (Abs.) 140
sampling. B. L. Legendre *et al.* (Abs.) 140
– J. A. Mariotti *et al.* (Abs.) 306
– G. Menezes. (Abs.) 120
– at Milliaquin. J. D. Malan. (Abs.) 57
sett exchange. M. Abarca. (Abs.).. 335
– germination. P. S. Tomer. (Abs.) 46
– – effect of planting depth. V. G. Castro *et al.* (Abs.) 79
– – – seed rate. A. M. Gorsi and N. D. Yusuf (Abs.) 275
– irradiation. J. T. Escober and M. E. Lopez. (Abs.) 240
– plastic mulching. H. C. Fu *et al.*.. 204
– spacing and borer attack. S. Hatmosoewarno. (Abs.) 174
– – trials in South Africa. J. P. Boyce. (Abs.)..... 48
– – and yield. A. Nath and J. Bajaj 336
"settlings". K. K. P. Rao. (Abs.).. 336
silicon content. R. L. Fox *et al.* (Abs.) 273
soil content in mill feed. A. L. Jones 89
– fumigation effect. S. P. Jaiswal and A. K. Rishi. (Abs.) 79
stalk breakage by wind in Louisiana. L. L. Lauden. (Abs.) 207
– holder and hand protector. F. J. Castro. (Pat.) 316
standover in Jamaica. (Brev.) 32
subsoiling effects. J. Glover. (Abs.) 48
– – P. K. Moberly. (Abs.)..... 241
– – in Hawaii. A. C. Trouse and R. P. Humbert. (Abs.)..... 275
sucrose biosynthesis. J. A. Bonnet 335
– – J. Edelman. (Abs.)..... 205
– – D. A. Walker. (Abs.)..... 205
– content and climatic influence. A. González G. (Abs.) 14
– – control by chemicals. A. G. Alexander. (Abs.) 335
– – – L. G. Nickell and T. T. Tanimoto. (Pat.) 348
– – determination. W. R. Crawford 297
– – – J. Dupont de R. de St. Antoine 152
– distribution, effect of low air temperature. R. R. Panje *et al.* (Abs.) 273

PAGE

Cane: sucrose translocation. D. C. Spanner. (Abs.) 205
sugar yield calculation. E. R. de Oliveira. (Abs.) 28
treatment for bagasse board manufacture. R. B. Miller and T. W. Raczuk. (Pat.) 188
– – – R. B. Miller *et al.* (Pat.) 188
"upright". G. T. A. Benda. (Abs.).. 81
washing at Luabo. T. Covas. (Abs.) 84
water and phosphorus utilization, effect of gibberellic acid. A. G. Alexander. (Abs.) 241
– requirements. P. C. Ekern. (Abs.) 110
– – G. J. Ham. (Abs.)..... 305
– – in Costa Rica. S. A. Gavande and M. A. Gonzalez. (Abs.).. 305
weighing. I. T. Freshwater. (Abs.) 47
yield, effect of intercropping. S. Y. Peng and W. B. Sze. (Abs.).... 305
– – leaf nitrogen and moisture. T. R. Srinivasan and A. Mariakulandai. (Abs.) 366
– – mosaic. R. L. Tippett. (Abs.) 275
– – row spacing. K. C. Freeman .. 79
– in Mexico. D. Ontiveros H. (Abs.) 46
see also Animal fodder; Diffusers; Diffusion; Diseases; Factory; Fertilizers; Irrigation; Juice; Mechanization; Molasses; Payment; Pests; Soil; Transport; Varieties; *and* Wax
Carbon, Active. J. Donnat. (Abs.).... 342
M. Smíšek and S. Černý. (N.B.).... 344
beet juice and liquor decolorization. S. Zagrodzki *et al.* (Abs.) 55
– – treatment. J. P. Cahen and A. Giglio. (Abs.)..... 373
colorant adsorption. A. N. Kiselev and V. N. Golubev. (Abs.)..... 248
colour removal from affined sugar. T. Yamane *et al.* (Abs.) 342
– – with carbon-resin mixtures. B. N. Dickinson and H. E. Barrett. (Abs.) 281
– – in sugar refining. V. Valter.. 344
"Darco". (T.N.)..... 158
evaluation 304
"Koblit". W. von Proskowetz. (Abs.) 281
porosity and decolorizing efficiency. J. T. Truemper. (Abs.) 216
production from bagasse. J. Gayol 379
– – B. Kudriashov. (Abs.)..... 379
regeneration equipment. (T.N.).... 62
removal from refinery liquor by trap filter. R. Velázquez R. (Abs.).. 343
tablets for decolorization. Pittsburgh Activated Carbon Co. (Pat.).... 58
Carbon, Granular: colour removal. J. Donnat. (Abs.) 342
– – in combination with ion exchanger. N. A. Arkhipovich and B. A. Kutsenko. (Abs.).. 88
– – from refinery syrup. A. N. Kiselev and V. N. Golubev.. 281
– – – Y. O. Kravets *et al.* (Abs.).. 88
– – – G. F. Spink. (Abs.)..... 375
– – – V. Valter. (N.B.)..... 344
– – – L. G. Vorona and K. D. Zhura 153
– – – F. M. Williams. (Abs.)..... 181
vs. bone char in refining. A. M. Moult. (Abs.)..... 375
Carbonatation. B. Bernadac. (Abs.) 245
P. Devillers *et al.* (Abs.)..... 372
H. Gelen. (Abs.)..... 54, 374
A. K. Kartashov *et al.* (Abs.) 213, 246, 247
V. A. Kolesnikov *et al.* (Abs.)..... 340
F. Schneider. (Abs.)..... 117
albumin decomposition and coagulation. J. Vašátko and A. Dandár 373
alkalinity automatic control. W. O. Bernhardt and F. G. Els. (Abs.) 310
cane juice alkalinity and mud particle size. A. C. Raha. (Abs.)..... 27
– molasses. H. J. von der Linde and W. Haberich. (Pat.) 317
with chloride-of-lime for liquor decolorization. J. Bureš and M. Friml. (Abs.)..... 281
CO_2 hydration. J. Vašátko *et al.*.. 283
efficiency and thick juice purity. H. Hrubíšek. (Abs.)..... 212
equipment incrustation composition. G. Vavrinecz. (Abs.)..... 90
evaporator scale reduction. A. S. Gal'perin. (Abs.)..... 86
experimental. K. I. Michev and I. F. Bugaenko. (Abs.) 55
ion exchange application. R. Kunin 177
juice filtration *vs.* settling. I. F. Gleizer and E. S. Khasilev. (Abs.) 149

PAGE

Carbonation: juice heating. B. B. Paul and I. S. Saxena. (Abs.) 115
– level and CO_2 utilization. L. G. Vorona *et al.* (Abs.)..... 279
– recycling to prelimng. P. Güray 54
laboratory. S. L. Shoikhet and A. K. Kartashov. (Abs.)..... 183
– comparison with factory results. L. Wieninger and N. Kubadinow. (Abs.) 313
lime-colloid coagulate size. J. Bartsch. (Abs.)..... 310
liming. V. V. Zlaman. (Abs.)..... 22
– automatic control. J. Cuel. (Abs.) 374
– – – W. Stankiewicz. (Abs.)..... 372
– – – S. Zagrodzki and J. Dobrzycki 371
– with calcium hydrosol. J. Mijakowski. (Abs.)..... 86
– temperature. V. A. Kolesnikov and V. A. Maksyutov. (Abs.) 86
– – and evaporator juice colour. H. Zaorska and S. Zagrodzki 280
mud drying. W. Stankiewicz. (Abs.) 121
– filtration. V. A. Zambrovskii *et al.* 55
– fluidization. W. Stankiewicz .. 180
– lime recovery and re-utilization. V. Bizau. (Abs.)..... 212
– sintering and pelleting iron ore fines. V. Seshadri *et al.* (Abs.) 185
– sweetening-off. V. I. Gorbatyuk 311
phosphate addition for animal fodder. S. T. Dexter *et al.* (Abs.)..... 154
pre-defecation mud removal. S. P. Olyanskaya and K. D. Zhura. (Abs.) 28
– – – R. G. Zhizhina *et al.* (Abs.) 22
refinery liquor. K. I. Michev *et al.* 88
– – K. Muraoka *et al.* (Abs.).... 342
sucrose decomposition by lime. F. Schneider *et al.* (Abs.) 283
vessel. F. Domsa. (Abs.) 245
– B. B. Paul. (Abs.) 115
see also Clarification *and* Juice, Beet
Caroni Ltd.: control purchase. (N.C.) 290
– report 1968/69. (N.C.)..... 2
Centrifugals. (T.N.)..... 222
accidents. G. Schneider. (Abs.).... 22
automatic Buckau-Wolf. P. V. Zobnin *et al.* (Abs.)..... 213
– Sangerhausen. N. F. Bondarenko *et al.* (Abs.) 87
– – G. Malatinszky. (Abs.) 87
basket corrosion. L. Lincoln. (Abs.) 338
BMA order. (Brev.)..... 222
brake. Maschinenfabrik Buckau R. Wolf A.G. (Pat.)..... 155
Broadbent order. (Brev.) 94
continuous. R. Hardy. (Abs.).... 309
– Hitachi Shipbuilding & Engineering Co. Ltd. (Pat.) 59
– L. K. Kirby. (Abs.)..... 21
– massecuite feed valve. American Factors Associates Ltd. (Pat.) 125
– Western States. (T.N.) 189
– *vs.* batch. J. M. Coleman. (Abs.) 150
drives, BMA. Y. B. Skibinskii. (Abs.) 55
– control. L. M. Didkovskaya. (Abs.) 246
– coupling. G. A. Kaminskii *et al.* 22
massecuite feeding. T. Kajiyama and A. Yamaguchi. (Abs.)..... 342
– – valve. M. I. Il'in and V. I. Pugachev. (Abs.) 117
– optimum temperature. D. E. Sinat-Radchenko and V. D. Popov. (Abs.) 212
– washing. J. Dávid. (Abs.)..... 87
– – S. P. Misra. (Abs.) 115
refinery low-grade recovery. F. M. Chapman 11
Centrifuge: cane molasses treatment. J. J. Baisa. (Abs.)..... 146
– syrup treatment. A. Babin. (Abs.) 372
Ceylon cane pests. Z. A. Siddiqui.. 46
Chemical engineering dictionary. W. E. Clason. (N.B.) 25
Chile: Rapaco sugar factory. (Brev.) 286
sugar industry. L. Hutzl. (Abs.).. 246
– – B. Kretschmer. (Abs.)..... 118
– production 1969/70. (Brev.).... 287
Chromatography, Column: sugars separation. P. Vrátný. (Abs.)..... 251
Chromatography, Gas-liquid: lactic acid determination in beet juice and molasses. J. F. T. Oldfield *et al.*..... 35
– rum and alcohol analysis..... 303
Chromatography, Paper: amino-acids determination in cane molasses. M. L. Rodriguez. (Abs.)..... 377
– separation from distillery waste. K. A. Prabhu and R. M. Maithani. (Abs.) 120

INDEX

PAGE

Chromatography, Paper:
raffinose and kestose determination in sucrose solutions. G. Saglietto and G. Mantovani. (Abs.)..... 345
sugars location by dipping reagents. J. F. Clapperton and I. C. MacWilliam. (Abs.)..... 346
Chromatography, Thin-layer: aflatoxin determination in beet pulp. J. I. Teng and P. C. Hanzas. (Abs.).. 345
lactic acid determination in beet juice. V. Prey and H. Polleres .. 184
organo-tin pesticide analysis. P. Cenci and B. Cremonini. (Abs.).. 377
raffinose determination in beet molasses. K. Hangyál and L. Wöller 377
– and kestose separation. G. Saglietto and G. Mantovani. (Abs.) 345
saponin determination. D. Steganović *et al.* (Abs.) 27
Citric acid: factory in Turkey. (Brev.) 256
– production from molasses. Chas. Pfizer & Co. Inc. (Pat.)..... 349
Clarification. Anon. (Abs.)..... 338
J. G. Davies. (N.B.)..... 151
cane juice constituents. S. N. G. Rao *et al.* (Abs.) 116
colloid chemistry. P. Hidi. (Abs.) 216
difficulties with Co 1148 juice. S. C. Gupta. (Abs.)..... 116
– – – M. Mohan and K. K. Sharma 116
– – – D. P. Sanjana *et al.* (Abs.). 20, 116
with flocculation aids. W. Briese.. 180
– – F. C. Buhl *et al.* (Pat.) 317
– – B. P. Butler. (Abs.)..... 52
– – J. Casey. (Abs.) 210
– – A. C. Chatterjee *et al.* (Abs.).. 278
– – S. C. Gupta *et al.* (Abs.)..... 116, 145
– – B. B. Pawar. (Abs.) 308
with magnesium oxide. (T.N.)..... 30
– – O. Argudín. (Abs.)..... 114
– – C. M. Madrazo. (Abs.)..... 210
– – V. Potrojov and S. Morales .. 376
mud level. B. L. Mittal. (Abs.).... 115
– settling. S. N. G. Rao and S. C. Sharma. (Abs.) 116
non-sugars formation and elimination. J. C. González M. (Abs.).. 309
with phosphated starch. H. E. Bode 348
phosphoric acid. T. T. Oommen and B. S. Gurumurthy. (Abs.).. 115
prelimingand juice pH drop. T. K. Mukerjee. (Abs.)..... 115
refinery liquor. R. Velázquez R... 343
with superphosphate. A. C. Chatterjee *et al.* (Abs.)..... 278
vacuum at Darnall. R. D. Archibald 84
see also Juice, Cane
Clarifiers. H. Pérez A. (Abs.) 243
ATV performance comparison. R. I. Denny and G. P. James. (Abs.) 52
mud deaeration. D. Suliteanu. (Abs.) 375
– filtration. H. Frost. (Abs.).... 211
– – J. R. Stembridge. (Abs.) 20
multi-tray subsiders. D. J. Hale.. 52
performance comparison. P. N. Stewart and K. J. Nix. (Abs.).. 52
vs. filter-thickeners. B. I. Kats and A. S. Oaityanskii. (Abs.)..... 247
Codex Alimentarius sugar standards. C. B. Broeg. (Abs.)..... 184
Colombia: bagasse paper manufacture. (Brev.) 351, 384
– – – Anon. (Abs.) 379
sugar data. (Brev.)..... 191
– industry. Anon. (Abs.)..... 20
Colonial Sugar Refining Co. Ltd.: Fiji withdrawal plans. (Brev.)..... 160
raw sugar production. (N.B.) 321
report 1970.. (N.C.)..... 258
Colour: cane molasses browning polymers. W. W. Binkley 5
colorant inhibition of sucrose crystallization. S. Zagrodzki. (Abs.).... 280
– properties and isolation in refining. K. J. Parker and J. C. Williams 216
– separation from cane molasses. N. H. Smith. (Abs.) 216, 346
– – raw sugar and refinery products. L. Farber *et al.* (Abs.)..... 376
– – refinery molasses. K. Hangyál 251
– – – products. L. Farber *et al.*... 216
determination in beet sugar factory products. I. F. Bugaenko *et al.*... 282
– – – S. Subaygil. (Abs.)..... 89
– raw sugar. Anon. (Abs.) 250
– refined sugar. M. Muro *et al.* (Abs.) 377
– – – and invert sugar. K. W. R. Schoenrock. (Abs.) 345
– sugar. P. Devillers *et al.* (Abs.).. 283

PAGE

Colour: determination in white and refined sugar. A. Y. Zagorul'ko and L. A. Korobeinikova... 119, 377
– – – visual assessment. D. Hibbert *et al.* 227
evaporator juice, effect of level. H. Zaorska and S. Zagrodzki. (Abs.) 215
– – – liming temperature. H. Zaorska and S. Zagrodzki.. 280
formation in beet juice. E. Steineck 314
– – – during sulphitation. H. Polleres. (Abs.)..... 310
– – – effect of pH. N. Kubadinow. 313
– cane juice, effect of pH and temperature. B. B. Paul and I. S. Saxena. (Abs.)..... 115
– by dextrose decomposition. S. Kara-Murza *et al.* (Abs.)..... 90
– rate in glucose and invert sugar solution. A. R. Sapronov... 153
– invert sugar decomposition. V. A. Kolesnikov *et al.* (Abs.)..... 28
– – – products and melanoidin. A. R. Sapronov and K. N. Dunaeva. (Abs.)..... 282
– in phosphated beet juice. W. Braunsteiner. (Abs.)..... 310
– sugar solutions, effect of amino-acids. A. R. Sapronov *et al.*.... 183
– – – heat. L. I. Trebin *et al.* (Abs.) 183
melanoidin formation. G. Petershofer. (Abs.) 314
– – V. Prey. (Abs.)..... 119
– fractionation. H. Tsuchida and M. Komoto. (Abs.)..... 376
refined and white sugar contents. S. Hase *et al.* (Abs.)..... 346
refinery liquor analysis..... 303
removal with active carbon. J. P. Cahen and A. Giglio. (Abs.) 373
– – – J. Gayol. (Abs.) 379
– – – A. N. Kiselev and V. N. Golubev. (Abs.)..... 248
– – – Pittsburgh Activated Carbon Co. (Pat.) 58
– – – J. T. Truemper. (Abs.)..... 216
– – – S. Zagrodzki *et al.* (Abs.).. 55
– from affined sugar. T. Yamane *et al.* (Abs.)..... 342
– by carbonatation with chloride-of-lime. J. Bureš and M. Friml.. 281
– granular carbon. J. Donnat. .. 342
– – – A. N. Kiselev and V. N. Golubev. (Abs.)..... 281
– – – Y. O. Kravets *et al.* (Abs.).. 88
– – – A. M. Moult. (Abs.)..... 375
– – – G. F. Spink. (Abs.)..... 375
– – – L. G. Vorona and K. D. Zhura 153
– – – F. M. Williams. (Abs.).... 181
– ion exchange..... 303
– – – I. M. Abrams. (Abs.)..... 281
– – – G. Assalini. (Abs.) 55
– – – D. F. Bagster..... 134, 200
– – – K. Čiž. (Abs.)..... 343
– – – P. Devillers and M. Loilier.. 180
– – – S. C. Gupta *et al.* (Abs.).... 116
– – – T. Ionescu and F. Domsa. 181, 343
– – – R. Kunin. (Abs.)..... 177
– – – R. Kunin and F. Pollio. (Abs.) 181
– – – N. K. Kvacheva. (Abs.)..... 342
– – – A. Miyahara. (Abs.) 248
– – – after electrodialysis. A. P. Kozyavkin *et al.* (Abs.).. 179
– – – effect of syrup pH. S. Z. Ivanov and G. A. Chikin 150
– – – resin. I. K. Suzuki *et al.* (Abs.) 342
– – – active carbon/adsorbent mixtures. B. N. Dickinson and H. E. Barrett. (Abs.).... 281
– – – cycle calculation. G. A. Chikin and G. N. Tyuleneva 248
– – – damage. G. A. Chikin *et al.* 217
– with plant extract. F. G. Lippe and F. Suppan. (Pat.)..... 316
– from refinery liquor. N. A. Arkhipovich and B. A. Kutsenko.. 88
– – – S. A. Brenman *et al.* (Abs.) 88
– with surface-active agent..... 303
see also Bone char; Carbon; Ion exchange *and* Refining
Commission Internationale Technique de Sucrerie 14th General Assembly 1971 223
Compressors. (T.N.) 254
Computers. (T.N.)..... 254
beet diffusion automatic control. J. Oledzki. (Abs.) 86
– factory application. P. Peters.. 374
– product purity determination .. 318

PAGE

Computers:
cane milling simulation. W. McWhinney and C. R. Murry. (Abs.) 53
– – – G. E. Russell and C. R. Murry 53
– payment system in Philippines. C. O. Ortaliz. (Abs.)..... 210
– sucrose and delivery data in South Africa. J. C. Williams and T. R. Loudon. (Abs.) 178, 206
– sugar factory calculations. R. Lee 85
continuous sucrose. Brix and purity determination. Hawaiian Development Co.. (Pat.) 93
evaporator simulation. D. B. Batstone and R. G. H. Prince. (Abs.) 53
mobile data logging laboratory in Australia. Anon. (Abs.)..... 120
Control, Automatic. J. Genotelle and R. Michel. (Abs.)..... 214
beet diffuser formalin dosing. V. G. Sibirtsev *et al.* (Abs.)..... 149
– diffusion. J. Oledzki. (Abs.)..... 86
– – temperature. E. S. Finskii .. 149
– pile forced ventilation. V. Hrdlička and V. Valter. (Abs.).. 22
boilers. N. Magasiner. (Abs.).... 84
boiling. (T.N.) 62, 221
– J. de Cremoux. (Abs.)..... 280
– H. Hartl and K. Wellenhofer. (Abs.) 86
– S. Honda. (Abs.)..... 342
– R. N. Johnson. (Abs.)..... 21
– A. Joseph. (Abs.) 85
– M. de Marbaix *et al.* (Abs.).... 214
– J. J. Quintero. (Abs.)..... 210
– H. Thiele and A. Langen. (Abs.) 23
– J. G. Ziegler. (Abs.) 114
cane carrier. M. R. Galeon and E. T. Dalipe. (Abs.) 210
carbonatation. W. O. Bernhardt and F. G. Eis. (Abs.) 310
– J. Cuel. (Abs.) 374
– W. Stankiewicz. (Abs.)..... 372
– S. Zagrodzki and J. Dobrzycki.. 371
centrifugal drive. L. M. Didkovskaya. (Abs.)..... 246
– – P. V. Zobnin *et al.* (Abs.)..... 213
equipment. (T.N.)..... 254
evaporator. J. J. Quintero. (Abs.) 338
– juice Brix. W. Grasmann and O. Parisek. (Abs.)..... 148
– – – and level. M. Bosnjak..... 235
– – – R. de la Torre. (Abs.)..... 150
filter. R. Y. Jehu and S. Stachenko 181
instruments in Mexican sugar factory. O. Hernández R. (Abs.)..... 277
level. (T.N.) 30, 62, 350
melt liquor Brix. E. R. Allen. (Pat.) 122
pneumatic convertors. J. Pulaczewski and S. Micjalowicz. (Abs.) 23
pressure switches. (T.N.)..... 189
systems. (T.N.)..... 254
thermostats. (T.N.) 286
white sugar drying and cooling. V. V. Zvorykin *et al.* (Abs.)..... 179
see also Computers *and* Instruments
Control, Chemical: alcohol distillery. T. Göçmençelebi. (Abs.)..... 154
analytical methods in refining. R. W. Plews. (N.B.)..... 249
beet dirt content determination. L. M. Laskutova and E. V. Panferova. (Abs.)..... 27
– optically-active matter determination. A. Y. Zagorul'ko and A. A. Ponomarenko. (Abs.) 153
– rasp. A. Dandár *et al.* (Abs.).... 152
– sample cleaner. N. E. Carver and J. M. Silver. (Pat.)..... 124
– sampling. P. Devillers and S. Tourlière. (Abs.) 117
– – topping and analysis. J. Jorritsma and J. F. T. Oldfield.. 346
– sugar loss calculation. A. Y. Zagorul'ko *et al.* (Abs.) 372
– tarehouse laboratories in US. C. L. Schmalz *et al.* (Abs.).... 282
– – process and equipment. M. Friml and K. Toninger. (Abs.) 27
cane deterioration calculation. G. R. Serbia. (Abs.) 183
– fibre determination. L. P. Hebert and N. I. James. (Abs.)..... 215
– – – N. D. Stevenson *et al.*..... 70
– – – P. N. Stewart. (Abs.)..... 57
– juice relationships in milling. J. J. Gómez. (Abs.) 183
– – sampler. S. C. Jaggi. (Abs.).. 85
– – sampling in Australia. (Brev.) 96
– milling evaluation. U. C. Upadhiaya. (Abs.)..... 211

INDEX

PAGE

Control, Chemical:
cane molasses exhaustibility evaluation. J. J. Balsa and G. R. Serbia 183
– – – R. G. Camurungan. (Abs.).. 244
– – – J. Dupont de R. de St. Antoine and E. C. Vignes 153
– – – R. Singh and N. C. Varma 120
– sampler. G. Menezes. (Abs.).... 120
– sampling at Milaquin. J. D. Malan 57
– soil determination. A. L. Jones 89
– sucrose determination. W. R. Crawford 297
– – – J. Dupont de R. de St. Antoine. (Abs.) 152
– – – and delivery in South Africa. J. C. Williams and T. R. Loudon. (Abs.)..... 178
– sugar factory calculations with computer. R. Lee. (Abs.)..... 85
– – – yield calculation. E. R. de Oliveira. (Abs.)..... 28
invert sugar determination. A. J. Ancona *et al.* (Abs.)..... 215
– – – F. Tödt and J. G. Abraham 22
massecuite yield calculation. E. D. Jensen. (Abs.)..... 52
mobile data logging laboratory. Anon. (Abs.)..... 120
molasses analysis. H. J. Reiche *et al.* 215
– exhaustibility determination. D. E. Sinat-Radchenko and V. D. Popov. (Abs.)..... 212
– sugar content. T. P. Khvalkovskii. (Abs.)..... 372
purity determination. Hawaiian Development Co. (Pat.) 93
– – M. Králová and V. Valter. (Abs.) 345
– – M. Mächler *et al.* (Abs.)..... 346
– – G. E. Sloane and K. M. Onna. 188
Queensland sugar factory laboratory manual. (Anon.) N.B.)..... 182
raw sugar quality. J. C. P. Chen.. 178
– – – in Philippines. T. R. Ancheta 250
– – – C. M. Madrazo. (Abs.)..... 217
– – – Puerto Rico. C. A. Martínez 244
– – sampling and testing. Anon... 250
– – and white sugar quality evaluation. M. Friml. (Abs.) 217
reduced boiling house recovery calculation. R. C. Bhandari. (Abs.) 277
– – – T. T. Oommen and B. S. Gurumurthy. (Abs.)..... 243
sucrose determination. (T.N.)..... 318
– – in beet. W. Mauch. (Abs.).... 378
– – – cossettes. H. Neumann. (Abs.) 27
– – boiler feed water. Anon. (Abs.) 340
– – with borax. J. Fernández B. and J. Marinello M. (Abs.).. 89
– – isotope dilution. T. A. McGagin and F. G. Eis. (Abs.)..... 119
– loss determination in liming. F. Schneider *et al.* (Abs.)..... 283
– – – waste water. Svenska Sockerfabriks AB. (Pat.)..... 58
sugar factory output calculation. A. Hilado. (Abs.) 210
white sugar quality evaluation. Anon. 152
– – standards in East Germany. W. Jäschke. (Abs.)..... 282
unfermentable reducing matter and cane molasses polarization. J. P. Shukla and R. M. Maithani. (Abs.) 120
see also Ash; Brix; Colour; Filtrability; Invert sugar; Losses; Polarization; Reducing sugars; Sucrose; Sugar; Water *and* Weighing
Conveyors. (T.N.) 62, 126, 158, 222, 254
beet. N. A. Emel'yanov *et al.* (Abs.) 55
– E. J. E. Heyens. (Pat.) 380
belt brushes. (T.N.)..... 30
– idlers. (T.N.)..... 94
– for sugar. A. M. Guthrie and J. R. Pilcher. (Abs.) 84
chains. (T.N.) 286, 350
elevator buckets. (T.N.)..... 158
pneumatic for beet pulp. I. Harsányi and R. Kubovics. (Abs.)..... 87
– dust explosion hazard. R. E. Edwards and E. W. P. Cunneen 150
see also Bulk handling *and* Mills, Cane
Coolers, Sugar: Büttner-Werke AG... 155
fluidized bed. L. Neužil *et al.* (Abs.) 371, 373
– – S. Takahashi and S. Suzuki.... 24
– – S. Vermes. (Abs.)..... 371
– – V. V. Zvorykin *et al.* (Abs.).... 179
Cooling in the sugar industry. H. J. Delavier. (N.B.)..... 26
Copper: determination in white sugar. W. Mauch *et al.* (Abs.)..... 251
– *see also* Ash
Corrosion: F. Trabanelli *et al.* (Abs.).. 118

PAGE

Corrosion:
cane sugar factory equipment protection. S. K. Chattopadhyay.... 308
centrifugal baskets. L. Lincoln.... 338
– – G. Schneider. (Abs.)..... 22
evaporator tubes. P. Devillers *et al.* 245
iron, effects of non-sugars W. Braunsteiner. (Abs.) 314
prevention. V. C. Reyes. (Abs.).... 210
– in beet diffuser. J. Herčík and V. Jozefy. (Abs.)..... 149
– – – E. Waleriańczyk. (Abs.).... 374
– boilers. M. L. Polyak *et al.* (Abs.) 213
– protective coatings. S. K. Chattopadhyay. (Abs.)..... 115
resistance of tubes. G. Trabanelli *et al.* (Abs.)..... 373
stainless steel. H. A. Curwen. (Abs.) 370
steel tubes. A. de la Motte. (Abs.).. 371
Costa Rica: cane soils. M. A. Gonzalez and S. A. Gavande. (Abs.)..... 305
– irrigation. S. A. Gavande and M. A. Gonzalez. (Abs.)..... 305
Cranes. (T.N.) 94
Crawford, Dr. W. R., member of Panel of Referees 287
– C. W. Murray award. (Brev.)....224, 255
Crystallization, Massecuite: J. R. Ariosa M. (Abs.)..... 211
S. A. Brenman *et al.* (Abs.)..... 87
I. F. Bugaenko and L. B. Tuet. (Abs.) 248
– M. Anand. (Abs.)..... 278
– P. E. Cancienne. (Abs.) 177, 277
cooling. T. Méndez C. (Abs.)..... 309
– and crystal size. W. Szokol. (Abs.) 314
– crystallization rate. I. K. Popereka and Y. D. Kot. (Abs.)..... 341
frothing. R. D. Joshi. (Abs.)..... 278
green syrup. A. A. Gerasimenko and Z. B. Shaposhnikova. (Abs.).... 217
hot air treatment. S. A. Brenman *et al.* (Abs.) 181, 311
massecuite pre-curing. I. N. Akindinov. (Abs.)..... 279
molasses viscosity limiting effects. J. C. Chou. (Abs.)..... 20
optimum temperature. D. E. Sinat-Radchenko and V. D. Popov. (Abs.) 212
refinery low-grade recovery. F. M. Chapman 8
spray crystallization. Nippon Shiryo Kogyo Co. Ltd. (Pat.)..... 381
Crystallization, Sucrose: D. P. Kulkarni. (Abs.)..... 309
crystal shape determination. A. L. Jones. (Abs.)..... 57
enclave inclusions. D. L. Mackintosh and E. T. White. (Abs.)..... 57
impurities adsorption effect. A. VanHook. (Abs.) 250
inclusion ratio and crystal impurity content. R. P. Jennings. (Abs.) 90
non-sugars effect. B. Shamirian.... 314
– occlusion. T. Ando *et al.* (Abs.).. 376
rate determination. A. V. Zubchenko and V. P. Cherpakov. (Abs.).... 313
– – A. V. Zubchenko and S. E. Kharin. (Abs.)..... 346
see also Boiling *and* Massecuite
Crystallizer. (T.N.) 158
– laboratory. I. K. Popereka and A. P. Kozyavkin. (Abs.)..... 153
Cuba: borer biological control. L. C. Scaramuzza. (Abs.)..... 140
cane dry cleaning. A. F. Betancourt 114
– harvester/cleaner. (Brev.) 287
evaporators. A. Kosiavevich. (Abs.) 339
filter order for France. (Brev.).... 30
sugar expansion programme. (Brev.) 95
– factory performance assessment. J. R. Ariosa M. (Abs.)..... 211
– production. (N.C.) ..97, 129, 162, 193, 257
– stamps. (Brev.)..... 383
– statistics 194, 224
trade agreement with Morocco.... 133
Cube sugar: micro-organisms. L. Vokounová. (Abs.) 215
press. L. J. Chambon. (Pat.)..... 123
– mould non-stick coating. (T.N.) 350
see also Tablet sugar
Cyprus sugar imports 1969. (Brev.).. 128
Czechoslovakia: beet production 1969/70. (Brev.)..... 287
– thick juice storage. R. Hursky.. 371
Dunajská Streda factory. K. Hangyál *et al.* (Abs.) 371
new sugar factory. (Brev.)..... 96
raw and white sugar evaluation. M. Friml. (Abs.)..... 217
soil moisture requirements for beet. M. Veneni. (Abs.)..... 51

PAGE

Czechoslovakia:
sugar exports. (Stat.)..... 352
– factory equipment. (T.N.)..... 62
– industry contraction. (Brev.)..... 128
weighers. S. Boučék and V. Valter 373

Denmark: beet topping and harvesting. S. Oien. (Abs.)..... 276
sugar industry. H. Brüniche-Olsen.. 86
– – contraction. (Brev.)..... 172, 384
Density: liquid sugar. P. X. Hoynak and G. N. Bollenback. (N.B.).... 151
meter for liquids and gases. (T.N.).. 94
sugar solutions and syrup. A. A. Gerasimenko and Z. B. Shaposhnikova. (Abs.)..... 183
see also Brix
Dextran: in cane after harvesting.... 304
– – D. H. Foster. (Abs.).....21, 141
enzymatic hydrolysis. R. Bretschneider and J. Čopíková. (Abs.) 215
gum production. Colonial sugar Refining Co. Ltd. (Pat.)..... 60
see also Gum
Dextrose: anumal fodder. N. P. Bray.. 59
decomposition products. S. Kara-Murza *et al.* (Abs.)..... 90
determination in sugars. H. Bourzutschky and W. Mauch. (Abs.).. 283
melanoidin preparation. H. Tsuchida and M. Komoto. (Abs.)..... 376
recovery from sucrose-invert solution. K. Lauer *et al.* (Pat.)..... 348
refinery equipment order. (Brev.).. 350
solution colour formation rate. A. R. Sapronov. (Abs.)..... 153
– density. P. X. Hoynak and G. N. Bollenback. (N.B.) 151
see also Invert sugar; Reducing sugars *and* Sugar
Dictionary of chemical engineering. W. E. Clason. (N.B.)..... 25
– sugar technology. C. A. Müller. (N.B.) 344
Diffusers, Beet: BMA. (Brev.)..... 62
– and DDS. D. Babev. (Abs.).... 279
corrosion prevention. E. Waleriańczyk. (Abs.) 374
– and wear prevention. J. Herčík and V. Josefy. (Abs.)..... 149
disinfection. Diversey Ltd. (Pat.).. 93
– A. Simonart. (Abs.)..... 117
KDA-25-59M tower performance. A. V. Pokanevich *et al.* (Abs.).... 87
lubrication and temperature control. E. S. Finskii. (Abs.)..... 149
Olier operation in Turkey. H. Gelen 118
RT in US. Anon. (Abs.)..... 372
see also Diffusion, Beet
Diffusers, Cane. F. Dambrine. (Pat.) 124
J. Farmer. (Pat.)..... 122
W. Kaether and W. Dietzel. (Pat.) 316
R. Rodriguez *et al.* (Abs.) 178
H. F. Silver *et al.* (Pat.)..... 124
bagasse pre-pressing. Braunschweigische Maschinenbauanstalt. (Pat.) 59
DDS. H. A. Brüniche-Olsen. (Pat.) 220
De Smet. (Brev.)..... 189
disinfectant. Diversey Ltd. (Pat.).. 93
Honiron "Hi-Extractor". J. W. Bersch. (Abs.) 114
Nicaragua order. (Brev.)..... 350
Philippines order. (Brev.) 222
"Saturne". Anon. (Abs.) 147
Silver ring. H. B. Moser. (Abs.).... 244
see also Diffusion, Cane
Diffusion, Beet. H. Brüniche-Olsen .. 151
D. Schliephake and A. Wolf. (Abs.) 374
combined beet and cane processing. 128
– – – K. H. Parekh and C. J. Mahta 116
cossette residence time. D. Schliephake and A. Wolf. (Abs.)..... 179
– shape and extraction. S. M. Grebenyuk *et al.* (Abs.)..... 280
– thickness. G. V. Genie. (Abs.).. 340
DDS. S. Gawrych *et al.* (Abs.).... 212
– automatic control. J. Oledzki.. 86
diffusion rate content and cossette thickness. D. Schliephake and A. Wolf. (Abs.)..... 148
feed water treatment. A. A. Pyshnaya. (Abs.)..... 55
formalin distribution. F. Hollaus.. 310
– dosing. V. G. Sibirtsev *et al.* (Abs.) 149
juice and press water micro-organisms determination. E. A. Khodurskii and N. S. Chechel'. (Abs.)..... 217
– sugar determination. (T.N.)..... 318
laboratory evaluation. F. Schneider *et al.* (Abs.) 311

INDEX

PAGE

Diffusion, Beet:
mass transfer. V. M. Lysyanskii and A. P. Verkhola. (Abs.) 149
press water recycling. E. Slavíček and K. Sekl. (Abs.) 149
water quality. R. Pieck. (Abs.) 214
see also Control, Automatic; Diffusers, Beet; Factory *and* Losses
Diffusion, Cane. H. Brüniche-Olsen 151
E. J. Buchanan and L. M. S. A. Julienne 67, 99
P. Neuville 164
R. Rodríguez *et al.* (Abs.) 178
S. L. Saxena and S. K. D. Agarwal 309
"Auto-Diffuser" performance. P. P. Strich. (Abs.) 20, 277
combined beet and cane processing. 128
– – – K. H. Parekh and D. J. Mehta 116
DDS. D. P. Kulkarni and J. R. Unde 308
– – – K. H. Parekh and D. J. Mehta 116
– in Brazil. J. B. Karlsson 40
– India. K. H. Parekh and D. J. Mehta. (Abs.) 116
non-sugar extraction and removal. R. Ragbir. (Abs.) 278
pH, temperature and retention time effects. A/S De Danske Sukkerfabrikker. (Abs.) 244
"Saturne" bagasse exhaustion tests. J. Palaci. (Abs.) 370
Silver ring diffuser performances. H. B. Moser. (Abs.) 339
in South Africa. (Brev.) 320
stage efficiency calculation. E. J. Buchanan. (Abs.) 84
see also Diffusers, Cane *and* Factory
Diseases, Beet: *Alternaria* leaf spot fungi in India. A. N. Mukhopadhyay. (Abs.) 276
beet seedling protection from viruses. G. D. Heathcote. (Abs.) 19
breeding for yellows resistance in US. J. S. McFarlane *et al.* (Abs.) 307
Cercospora leaf spot control. G. C. Bongiovanni. (Abs.) 307
– – – G. E. Coe. (Abs.) 83
– – – H. Darpoux *et al.* (Abs.) 50
– – – Y. Gutstein and M. Zur. (Abs.) 144
– – – F. Koch and E. Schröter 307
– – – in Turkey. M. Göbelez. (Abs.) 83
– – – effect of treatment on beet. G. C. Lucci and G. Mantovani. (Abs.) 90
– – – resistance transference by back-crossing. T. Bilgen *et al.* (Abs.) 369
chemical control. A. G. Gallarate 337
control in beet growing for seed. H. Isák. (Abs.) 143
curly top virus and beet seed production. O. A. Hills and R. W. Brubaker. (Abs.) 176
– – – control. N. R. Malm and R. E. Finkner. (Abs.) 176
– – – hosts. P. E. Thomas. (Abs.) 209
Docking disorder control. Anon. 307
downy mildew control. W. Byford 242
– – effects on beet. J. Zdárský 152
fungal disease varietal resistance. G. E. Russell. (Abs.) 242
– root damage detection. C. Winner and W. R. Schäufele. (Abs.) 18
Rhizoctonia root rot control. M. M. Afanasiev and D. E. Baldridge 112
– – – resistance. J. O. Gaskill 112
soil-borne fungi. D. L. Mumford 176
in US. E. G. Ruppel. (Abs.) 83
– – E. Ruppel and R. J. Bird. (Abs.) 369
virus yellows. R. T. Lewellen *et al.* 337
– – G. E. Russell. (Abs.) 19
– – and beet growth. R. Hull. (Abs.) 144
– – control through aphid reduction 126
– – – in U.K. R. Hull. (Abs.) 113
– – damage in Belgium. Anon. 337
– – infection and amino-acids. J. M. Fife. (Abs.) 276
– – and mosaic control. F. I. Hills *et al.* (Abs.) 307
– – spread by aphids. W. Steudel and R. Thielemann. (Abs.) 50
– – – effect of beet spacing and planting time. G. D. Heathcote. (Abs.) 369
– – varietal resistance. J. S. McFarlane and I. O. Skoyen. (Abs.) 144
winter yellows virus. J. E. Duffus 307
Diseases, Cane. A. D. Hanna. (Abs.) 80
in Africa. H. Barat. (Abs.) 17
bacterial mottle control. D. R. L. Steindl. (Abs.) 80

PAGE

Diseases, Cane:
Ceratocystis paradoxa and *C. adiposum* effect on bud germination. T. T. Kuo *et al.* (Abs.) 367
chlorotic streak and tetracyclines. B. T. Egan. (Abs.) 81
control in Australia. C. G. Hughes 141
– by cane heat treatment. K. V. Srinivasan and J. T. Rao. (Abs.) 14
– in Fiji. Anon. (Abs.) 79
Fiji disease control in Australia. C. G. Hughes. (Abs.) 205
– – – by leafhopper sterilization. A. W. Osborn. (Abs.) 81
– – and ratoon stunting in Australia. C. G. Hughes. (Abs.) 204
grassy shoot. S. J. Jaiswal and I. S. Bhatia. (Abs.) 17
in India. S. K. Rulkar and G. K. Patwardhan. (Abs.) 206
– S. S. Sandhu *et al.* (Abs.) 80
international index. Anon. (Abs.) 81
– slide collection. Anon. (Abs.) 81
leaf blight control in Taiwan. L. S. Leu and W. H. Hsieh. (Abs.) 80
– gall cause. F. M. L. Sheffield. (Abs.) 274
– scald. C. G. Story. (Abs.) 46
– – acute stage. C. G. Hughes. (Abs.) 336
– – control. Anon. (Abs.) 109
– – in Mozambique. C. Ricaud 81
– – resistance testing. B. T. Egan 142
– – – in Hawaii. C. A. Wismer 81
– – in South Africa. Anon. (Abs.) 17
– – – and Swaziland. G. M. Thomson. (Abs.) 274
– – strains. B. T. Egan. (Abs.) 241
– – threat in Louisiana. S. J. P. Chilton and R. J. Steib. (Abs.) 15
maize dwarf mosaic varietal susceptibility. A. G. Gillaspie. (Abs.) 80
in Mexico. S. Flores C. (Abs.) 111
mosaic. G. T. A. Benda. (Abs.) 368
– in Australia. Anon. (Abs.) 141
– and cane yields. R. L. Tippett 274
– control. Anon. (Abs.) 17
– host. K. S. Bhargave *et al.* (Abs.) 274
– in India. M. L. Seth. (Abs.) 13
– and maize dwarf mosaic viruses in US and Australia. R. D. Pares 80
– resistance of wild clones. P. H. Dunckelman and R. D. Breaux 275
– – – in US. L. L. Lauden. (Abs.) 15
– in Rhodesia. Anon. (Abs.) 80
– strains. R. D. Breaux and P. H. Dunckelman. (Abs.) 367
– susceptibility of *Saccharum* spp. B. A. Bourne. (Abs.) 175
– varietal resistance. L. L. Lauden 368
pineapple disease control. B. C. Patel-Kulkarni and J. E. C. Aberdee. (Abs.) 367
– – inoculation tests. H. W. Boyd and C. C. Allison. (Abs.) 49
ratoon stunting. Anon. (Abs.) 273
– – control. B. T. Egan. (Abs.) 336
– – effect of drought in Australia. D. R. L. Steindl. (Abs.) 142
– – in India. G. R. Singh and M. M. Rao. (Abs.) 241
– – Taiwan. C. S. Wang. (Abs.) 13
red rot. O. S. Rana and S. C. Gupta 206
– – G. R. Singh. (Abs.) 13
– – in Australia. B. T. Egan. (Abs.) 47
– – varietal resistance. G. P. Singh and N. Singh. (Abs.) 111
research in Uganda. P. Rogers 81
in Réunion. Anon. (Abs.) 140
rust control in India. S. K. Rulkar and S. B. Deshpande. (Abs.) 207
smut. J. M. Walker. (Abs.) 13
– infection of cane seedlings. H. A. Talbalia. (Abs.) 368
– resistance testing. K. V. Srinivasan. (Abs.) 80
– in Rhodesia. G. L. James. (Abs.) 49
– spore viability. G. L. James. (Abs.) 241
standard nomenclature. P. B. Hutchinson. (Abs.) 80
stem rot control. G. Roth. (Abs.) 49
varietal resistance in India. M. R. Kelkar. (Abs.) 14
– – Réunion. Anon. (Abs.) 142
white leaf. S. C. Lin and C. S. Lee 274
yellow wilt. M. A. Siddiqi. (Abs.) 274
Distillery: in Jamaica. Z. Bacchus and E. Elliot. (Abs.) 185
plant. (T.N.) 350
waste amino-acids separation. K. A. Prabhu and R. M. Malthani. (Abs.) 120
– animal fodder. (Brev.) 192
– – – V. Henry. (Abs.) 121

PAGE

Distillery: waste animal fodder. Lesaffre et Cie. (Pat.) 349
– chemical oxygen demand. O. Rodríguez and J. Kucera. (Abs.) 377
– composition. O. Vaisechi. (Abs.) 92
– as fertilizer and for potassium salts recovery. D. L. N. Rao. (Abs.) 29
– potassium salts recovery. S. C. Gupta *et al.* (Abs.) 185
– treatment. O. Jaag. (N.B.) 26
– – P. D. Smith and H. W. Archer 146
– unfermentable reducing matter. J. P. Shukla and R. M. Malthani 120
– yeast production. O. Almazán 379
– – – J. Skiba and O. Ilnicka-Olejniczak. (Abs.) 347
see also Alcohol; Fermentation *and* Rum
Dominican Republic: ISA quota increase sought. (Brev.) 352
– – sugar exports 1969. (Brev.) 384
Drives. (T.N.) 62
cane carrier automatic control. M. R. Galeon and E. T. Dalipe. (Abs.) 210
– mill. D. J. Wright. (Abs.) 53
– – effect of thrust. D. B. Mostert 178
– – turbines. (T.N.) 254
centrifugal. L. M. Didkovskaya 246
– Y. B. Skibinskii. (Abs.) 55
– P. V. Zobnin *et al.* (Abs.) 213
– coupling. G. A. Kaminskii *et al.* 22
hydraulic. A. F. Ashdown. (Abs.) 339
Dryers: beet pulp. Büttner Werke AG. 60
– – J. Lehóczki. (Abs.) 54
– – BMA order. (Brev.) 94
– – Salzgitter order. (Brev.) 318
compressed air. W. F. McGrath 114
white sugar. Büttner-Werke A.G 155
Drying: beet pulp. M. G. Parfenopulo 185
carbonatation mud. W. Stankiewicz 121
raw sugar. A. K. Rapson. (Abs.) 52
refinery molasses. T. Miki and T. Shirasaki. (Abs.) 121
sugar fluidization. L. Neužil *et al.* 371
– – S. Vermes. (Abs.) 371
– – sugar moisture calculation. J. Turcaj and L. Neužil. (Abs.) 118
– industry. H. J. Delavier. (N.B.) 26
white sugar. V. V. Zvorykin *et al.* 179
yeast cream. O. Argudín. (Abs.) 91
Dust: control in refinery. B. A. Stephens. (Abs.) 248
explosions. A. V. Dan'ko and A. M. Kostenyuk. (Abs.) 212, 247
– G. Schneider. (Abs.) 149, 214
– hazard in refinery. R. E. Edwards and E. W. P. Cunneen. (Abs.) 150
– variables in refined and raw sugar. R. E. Edwards. (Abs.) 181

Education: cane agriculture instruction in Brazil. M. de Azevedo P. (Abs.) 367
– Institut für Zuckerindustrie, Berlin. N. Manyas. (Abs.) 117
Egypt: cane transport locomotives 382
sugar expansion. (Brev.) 63, 351
– production 1969/70. (Brev.) 256
Electrodialysis. P. Kadlec and J. Buriánek. (Abs.) 373
beet juice treatment. K. Čiž and V. Čejková. (Abs.) 212
– – – for colloidal matter determination. R. Bretschneider *et al.* 119
– molasses. I. M. Litvak *et al.* (Abs.) 179
– – organic acids determination. G. P. Voloshanenko and L. D. Bobrovnik. (Abs.) 250
– – – G. P. Voloshanenko *et al.* 153
– thick juice. I. F. Zelikman *et al.* 23
calcium chloride separation from sugar phosphates. R. G. Campbell and C. C. Oldenburg. (Pat.) 316
– – – Stauffer Chemical Co. (Pat.) 381
solution concentration and power consumption. R. T. Mishchuk *et al.* (Abs.) 117
syrup treatment before boiling. A. P. Kozyavkin *et al.* (Abs.) 179
Electrophoresis: molasses colorants fractionation. N. H. Smith. (Abs.) 346
Entrainment: separator. S. L. Saxena and L. Sanyal. (Abs.) 20
– K. S. Shah. (Abs.) 20
– washing. H. Geien. (Abs.) 23
Ethiopia: new sugar factory. (Brev.) 160
– Verenigde HVA-Mij. N.V. report 1969. (Brev.) 320

INDEX

Ethylene diamine tetraacetic acid: calcium and magnesium determination in yeasts. J. R. Biart and H. Pérez. (Abs.) 377
Europe: beet area 1970. (N.C.) 161
– – and harvest prospects. (N.C.) .. 194
– crop 1970. (N.C.) 226
– sugar production 1969/70. (N.C.) 2
– – – 1970/71 ..... 321, 354, 384
EEC sugar production limitation proposals. (Brev.) 63
– UK membership and Commonwealth sugar. (N.C.) 225, 322
Evaporators. A. Kosiavevich. (Abs.) 339
B. B. Paul. (Abs.) 242
condenser performances in Australia. P. N. Stewart and T. C. Mulvena 21
dynamic characteristics. A. P. Ladanyuk *et al.* (Abs.) 341
efficiencies. S. K. Saraph. (Abs.) .. 308
exergy loss calculation. A. M. Kozak and V. A. Solomykin. (Abs.) 279
falling-film. G. S. Fairhurst and A. Maylott. (Abs.) 248
heat transfer, juice level and Brix. J. Závorka *et al.* (Abs.) 211
juice colour, effect of level. H. Zaorska and S. Zagrodzki. (Abs.) 215
– – – liming temperature. H. Zaorska and S. Zagrodzki .. 280
– pH and pOH. V. A. Pronina and S. Z. Ivanov. (Abs.) 341
– purity rise. R. C. Bhandari. (Abs.) 339
laboratory, heat transfer coefficient. J. B. Cordiner *et al.* (Abs.) 90
Ookala factory. N. Saxby. (Abs.) .. 370
sealed downtake. G. Aleman. (Abs.) 178
– – M. Bosnjak. (Abs.) 246
– – J. G. Ziegler. (Abs.) 146
simulation. D. B. Batstone and R. G. H. Prince. (Abs.) 53
stainless steel *vs.* copper tubes. J. A. Cotner. (Abs.) 146
steam requirement calculation. P. Freund. (Abs.) 374
tube corrosion. P. Devillers *et al.* .. 245
– – A. de la Motte. (Abs.) 371
– – resistance. G. Trabanelli *et al.* 373
– flaw measurement. S. R. Durreli 21
– length effects. N. Y. Tobilevich *et al.* (Abs.) 149
– optimum length. V. V. Maiorov and L. P. Maiorova. (Abs.) 247
– silicone treatment. M. Wiekluk .. 54
– steam-side cleaning. R. D. Joshi 278
see also Control, Automatic; Corrosion; Entrainment; Heat exchanger *and* Scale
Extraction De Smet S.A. agreement with Fletcher and Stewart Ltd... 189

Factory: accidents. I. Murphy. (Abs.) 146
beet and cane equipment. (T.N.) .. 62
– design. M. Škrábal. (Abs.) 23
calculations with computer. R. Lee 85
critical path planning. R. Wong and R. Argüelles. (Abs.) 243
data collection and processing. P. Peters. (Abs.) 374
design for year-round working of beet and stored thick juice. M. Škrábal 23
equipment. (T.N.) 158, 189
– corrosion prevention. S. K. Chattopadhyay. (Abs.) 308
– exhibition. (Brev.) 160
– failure. Z. Kulik. (Abs.) 245
– manufacture in Philippines. J. J. Baum. (Abs.) 210
– – – A. M. Hain. (Abs.) 210
– stress measurement. A. A. Rozinskii and V. I. Kostyuk. (Abs.) .. 87
expansion at Puna. W. D. Fairchild. 370
fuel gas for welding. T. J. Grippen 85
heat economy. P. Freund .. 117, 340, 374
– – C. J. Lu *et al.* (Abs.) 243
– losses. W. von Proskowetz. (Abs.) 54
inspection probe. (T.N.) 158
inventory management. J. R. A. Montelibano and P. Pfiffner. (Abs.) 211
research in Australia. Anon. (Abs.) 243
spheroidal graphite cast iron applications. W. N. Bysantson. (Abs.) 84
stainless steel application. H. A. Curwen. (Abs.) 370
– – equipment. (T.N.) 286
steel properties and uses. J. M. Wagenet. (Abs.) 85
technology in India. R. N. Agarwal 177
Factory: technology in India. M. Mohan. (Abs.) 177
– – S. C. Sharma. (Abs.) 177
– – W. S. Warrier. (Abs.) 244
Fermentation: acetic acid production from cane molasses. M. A. Hussain 121
alcohol production from beet molasses. T. Göçmençelebi. (Abs.) .. 154
– – – T. P. Siyusarenko and E. P. Vitukevich. (Abs.) 347
– – cane juice. O. Valsechi. (Abs.) 92
– – – molasses. R. A. Cruz. (Abs.) 315
– – – A. E. de Erézcano de P. *et al.* 379
bagasse biodegradation. R. E. Druilhet *et al.* (Abs.) 154, 379
– – T. Macdonald. (Abs.) 91
cane molasses. J. A. Rosemberg 92
– – irradiation effects. H. Iizuka *et al.* (Abs.) 379
citric acid factory in Turkey. (Brev.) 256
– – production from molasses. Chas. Pfizer & Co. Inc. (Pat.) 349
fats production from cane molasses 198
fusel oil production from cane molasses. E. David P. (Abs.) 284
glutamic acid production. Ajinomoto Co. Inc. (Pat.) 156
– – – R. L. Harned. (Pat.) 187
– – – from beet molasses. I. P. Chernikova. (Abs.) 185
– – – International Minerals & Chemical Corp. (Pat.) 60
– – – from cane molasses. R. Y. Chua. (Abs.) 315
– – – Takeda Yakuhin Kogyo K.K. 349
– – – in Argentina. (Brev.) 64
molasses meal stickiness reduction. R. Roth. (Abs.) 154
must chemical oxygen demand determination. O. Rodríguez and J. Kucera. (Abs.) 377
protein production 304
– – from bagasse. C. E. Dunlap and C. D. Callihan. (Abs.) 218
rum and alcohol analysis 303
– – production in Jamaica. Z. Bacchus and E. Elliot. (Abs.) 185
sake production from cane molasses. H. Olbrich. (Abs.) 284
yeast production. L. Delvaux. (Abs.) 91
– – from beet molasses. E. Bergander. (Abs.) 185
– – cane juice. P. R. Cantarelli and J. G. B. Caruso. (Abs.) 29
– – – molasses. B. Revuz. (Abs.) 121
– – distillery waste. O. Almazán .. 379
– – – K. Ichikawa *et al.* (Abs.) 55
– – – and molasses. J. Skiba and O. Ilnicka-Olejniczak. (Abs.) 347
– – molasses. Y. Akyüz. (Abs.) .. 154
– – – P. Birolaud. (Abs.) 154
– – sugar-methanol mixture. K. A. Aroj *et al.* (Abs.) 185
see also individual fermentation products
Fertilizers: advisory service in Australia. O. W. Sturgess. (Abs.) .. 205
application rate and borer incidence. M. M. I. Khan and C. K. Muhammad. (Abs.) 274
"aqua ammonia" application. Anon. (Abs.) 305, 335
bagasse-pig manure mixture. Anon. 109
beet seed productivity. I. A. Yakimenko. (Abs.) 209
calcium silicate trials in Puerto Rico. E. Reyes S. and A. Velez R. (Abs.) 174
cane nutrient status. S. V. Parthasarathy *et al.* (Abs.) 206
cover crop in Australia. L. K. Izatt 336
distillery waste. D. L. N. Rao. (Abs.) 29
filter cake. Anon. (Abs.) 367
– – P. Bogdanova *et al.* (Abs.) 315
magnesium tests in UK. A. P. Draycott and M. J. Durrant. (Abs.) 143, 144
manganese sulphate. G. K. Zende. 273
in Mexico. B. Ortiz V. (Abs.) 111
nitrogen. Anon. (Abs.) 109, 366
– aerial and ground application. L. E. Golden. (Abs.) 81
– application with herbicides. I. J. Stewart and H. L. Boyle. (Abs.) 142
– in Australia. N. J. King. (Abs.) 141
– and beet virus yellows. R. T. Lewellen *et al.* (Abs.) 337
– – yield. E. C. Varsa. (Abs.) 113
– – – in sandy soil. E. von Boguslawski and R. Schildbach .. 51
– cane varietal response in India. I. J. Singh and P. P. Singh 167
Fertilizers: nitrogen and cane yields. C. N. Yoon and C. A. Kok. (Abs.) .. 14
– – – and irrigation. T. R. Srinivasan and A. Mariakulandai (Abs.) 241, 366
– – – M. B. Tippannavar and M. G. Reddy. (Abs.) 111
– and *Numicia viridis* fecundity. R. H. G. Harris. (Abs.) 49
– optimum dosage. S. S. Saini *et al.* 80
– – – J. M. Sharma *et al.* (Abs.) .. 80
– and phosphorus trials in India. B. Singh and A. N. Verma. (Abs.) 173
– and potassium uptake by beet. B. A. Lakhdive. (Abs.) 369
– and soil moisture. T. R. Srinivasan and A. Mariakulandai. (Abs.) .. 206
– treatment of plant cane and effect on ratoon crop. B. K. Mathur *et al.* (Abs.) 14
– trials. G. Covarelli. (Abs.) 83
– – in Australia. J. Wright. (Abs.) 16
– – Hawaii. D. T. Takahashi. (Abs.) 109
– uptake by cane. D. T. Takahashi 206
nutrient deficiency and cane drought resistance. K. N. Lal *et al.* (Abs.) 14
organic *vs.* inorganic trials in India. G. N. Misra. (Abs.) 14
overhead irrigation effect. L. Hájek 51
phosphate and cane flowering. A. M. Malukara and N. D. Yusuf. (Abs.) 275
– research in India. K. V. Joshi 206
phosphorus status of beet seedlings. K. M. Sipitanos and A. Ulrich 276
– uptake by beets. O. C. Soine. (Abs.) 112
– – cane, effect of gibberellic acid. A. G. Alexander. (Abs.) 241
potassium. M. Simon *et al.* (Abs.) .. 82
– and nitrogen effects on beet. G. J. Gascho *et al.* (Abs.) 276
– trials in US. D. W. James *et al.* 18
in Réunion. Anon. (Abs.) 140
sulphur-containing compounds. Anon. 16
urea *vs.* ammonium sulphate. P. S. Gill. (Abs.) 14
US trials. R. Ricaud. (Abs.) 111
Virgin Islands experiments. A. J. Oakes and O.Skov. (Abs.) 16
Fiji: cane clone cytology. S. Price and J. Daniels. (Abs.) 14
– varieties and disease control. Anon. 79
Colonial Sugar Refining Co. Ltd. 312
– – – report 1970. (N.C.) 258
– – – withdrawal plans. (Brev.) .. 160
drought. (Brev.) 32
sugar exports 1969. (Brev.) 352
Filters. A/S De Danske Sukkerfabrikker. (Pat.) 348
V. A. Zambrovskii *et al.* (Abs.) 213
"Autofilter". R. Velázquez R. (Abs.) 343
belt. (T.N.) 94
blockage detection. (T.N.) 350
DDS thickener-filter. (T.N.) 94
disc. I. F. Gleizer and E. S. Khasilev 149
Dorr-Oliver. (T.N.) 254
"Eimcobelt". J. R. Stembridge 277
filter cake removal. A. C. Kracklauer 157
– – – Sparkler Manufacturing Co. 220, 348
filter-thickeners. M. Czirfusz. (Abs.) 212
– – R. F. Madsen. (N.B.) 151
– – *vs.* clarifiers. B. I. Kats and A. S. Osityanskii. (Abs.) 247
Gaudfrin. F. Schneider. (Abs.) 117
ion exchange resin precoat removal. Union Tank Car Co. (Pat.) 58
plate-and-frame. V. A. Zambrovskii *et al.* (Abs.) 341
"Permasep". G. Vernois. (Abs.) 118, 372
presses *vs.* vacuum filters. F. Plasencia G. and J. A. Garcia G. (Abs.) 338
rotary. J. Strausz. (Abs.) 245
– BOU-40. V. A. Zambrovskii *et al.* 55
– Filtres Vernay order. (Brev.) 30
– (T.N.) 62
synthetic felt sleeves for candle elements. L. Bergmann. (Abs.) .. 117
trap for carbon removal from refinery liquor. R. Velázquez R. (Abs.) .. 343
Filter aid: perlite. R. Osvald and E. Haviová. (Abs.) 213
– I. Salánki. (Abs.) 54
pre-coat application by jet eductor. D. Suliteanu. (Abs.) 375
Filter cake: composition. O. Valsechi 91
– G. Vavrinecz. (Abs.) 90
as fertilizer. Anon. (Abs.) 367
– P. Bogdanova. (Abs.) 315
losses. F. Plasencia G. and J. A. García G. (Abs.) 338

INDEX

PAGE

Filter cake:
removal. A. C. Kracklauer. (Pat.).. 157
– I. Pável. (Abs.)..... 54
– Sparkler Manufacturing Co. (Pat.) 220, 348
soil conditioner. G. A. Anderson .. 157
sweetening-off. J. H. Duff. (Pat.).. 122
– – V. A. Zambrovskii *et al.* (Abs.) 246
– – at Montreal refinery. R. Y. Jehu and S. Stachenko. (Abs.).... 181
Filter cloth plant in South Africa .. 350
Filtrability: raw sugar determination. Anon. (Abs.)..... 250
– – – K. Amako and O. Kimura .. 376
Filtration: carbonatation effect. H. Gelen. (Abs.)..... 54
clarifier mud. H. Frost. (Abs.) 211
"Elmcobelt" operation. J. R. Stembridge. (Abs.) 20
juice curve determination. O. Argudín and J. Caba. (Abs.)..... 283
rate determination. Z. S. Voloshin.. 213
refinery liquor. S. B. Pollack *et al.*.. 343
ultra-filtration. (T.N.) 62
Finland refineries. G. Hernberg. (Abs.) 88
– sugar imports and exports. (Stat.).. 159
Flame photometry: ash determination in cane molasses. R. Singh. (Abs.) 120
– soluble calcium salts determination in beet juice. V. V. Zlaman. (Abs.) 377
Fletcher and Stewart Ltd.: agreement with Extraction De Smet S.A..... 189
cane mill gears. (Brev.) 189
C. W. Murray Award 1970. (Brev.) 224, 255
Flow: automatic measurement. (T.N.) 254
irrigation water control. W. O. Gibson. (Pat.) 188
– – – W. M. Redditt. (Pat.)..... 187
measurement of beet juice. W. Grasmann and O. Parisek. (Abs.) 148
– with radio-isotopes. J. K. Basson 90
– by rheometer for boiling control. H. Thiele and A. Langen. (Abs.) 23
meter. (T.N.)..... 286
Foam prevention in beet juice and molasses solution. R. Bretschneider *et al.* (Abs.)..... 86
Food industries manual. A. Woollen 182
France: beet agriculture. Anon. (Abs.) 209
– breeding. H. Laby *et al.* (Abs.) .. 50
– mechanical harvesting. R. Boiteau *et al.* (Abs.)..... 143
control equipment. J. Genotelle and R. Michel. (Abs.)..... 214
filter order from Cuba. (Brev.) 30
international food exhibitions. (Brev.) 160
sugar group rationalization. (Brev.) 272
– imports and exports. (Stat.) 160
thick juice storage. R. Hurasky.... 371
white sugar bulk transport. (Brev.) 350
French West Indies sugar industry revival plan. (Brev.) 95
Fructose, *see* Levulose
Furfural production from bagasse. J. Lodos. (Abs.)..... 29
Furnaces, Bagasse. V. J. Baillet.. 20, 277
– feeding. J. H. Payne. (Abs.) .. 177, 309
Fusel oil production from cane molasses. E. David P. (Abs.)..... 284

Galactinol determination. H. Schiweck and L. Büsching. (Abs.) 120
Gears. (T.N.)..... 30, 222
P. W. Jones. (Abs.)..... 21
for cane mills. (Brev.)..... 189
– – S. G. Clarke. (Abs.)..... 52
helical. A. K. De. (Abs.)..... 115
see also Drives
Germany, East: beet production. (Brev.) 64
sugar industry. G. Budai. (Abs.) .. 54
– production 1969/70. (Brev.).... 351
– quality standards. W. Jäschke... 282
Germany, West: beet campaign 1968/69. F. Schneider. (Abs.) 117
– pulp dryer order. (Brev.) 94
bulk storage equipment. W. Weilandt. (Abs.)..... 311
Institut für Zuckerindustrie. N. Manyas. (Abs.) 117
packaging machinery accidents. R. Krocher. (Abs.)..... 280
sugar factory closure. (Brev.)..... 159
– production 1969/70. (Brev.) 96
Ghana: sugar expansion. (Brev.) 344
– imports 1969. (Brev.) 287
– industry. H. J. Delavier and H. Hirschmüller. (Abs.)..... 277
Gibberellic acid: relationships to water and phosphorus in cane growth. A. G. Alexander. (Abs.) 241

PAGE

Glutamic acid: beet molasses content. E. A. Grivtseva *et al.* (Abs.) 153
factory in Argentina. (Brev.)..... 64
iron corrosion. W. Braunsteiner.... 314
production. Ajinomoto Co. Inc..... 156
– R. L. Harned. (Pat.) 187
– from beet molasses. I. P. Chernikova. (Abs.) 185
– – – International Minerals & Chemical Corp. (Pat.) 60
– cane molasses. R. Y. Chua. (Abs.) 315
– – – Takeda Yakuhin Kogyo K.K. 349
Greece beet harvest 1969. (Brev.) 64
– sugar expansion. (Brev.).....63, 255
Guatemala new sugar factory. (Brev.) 159
– sugar production 1969/70. (Brev.).. 182
Gum: effect on cane diffusion. A/S De Danske Sukkerfabrikker. (Abs.).. 244
– clarification. S. N. G. Rao *et al.* 116
– needle-shaped sugar crystal formation. M. Kamoda *et al.* (Abs.).. 376
occlusion in sugar crystal. T. Ando *et al.* (Abs.) 376
polysaccharide in deteriorated cane. J. Bruijn..... 195
production from dextran. Colonial Sugar Refining Co. Ltd. (Pat.).. 60
reduction in sucrose crystals. R. P. Jennings. (Abs.) 90
Gur: palm *vs.* cane. S. K. D. Agarwal and P. K. Aren. (Abs.)..... 120
Guyana: Booker McConnell report 1969 258
cane molasses pump order. (Brev.) 222
sugar production 1969. (Brev.).... 95
– – fears. (N.C.) 163

Hawaii: bagasse pulp proposal. (Brev.) 384
cane leaf scald resistance testing. C. A. Wismer. (Abs.) 81
chemical weed control. H. W. Hilton 241
deep tillage. A. C. Trouse and R. P. Humbert. (Abs.) 275
New Guinea cane weevil. W. C. Mitchell *et al.* (Abs.)..... 110
nitrogen fertilizer trials. D. T. Takahashi. (Abs.) 109
Puna factory equipment. W. D. Fairchild. (Abs.) 370
rat damage to cane. Anon. (Abs.).. 17
– tracking. Anon. (Abs.) 204
sugar factory closure. (Brev.)..... 256
waste water treatment and disposal. J. C. Schantz and F. N. Kemmer.. 370
Heat: balance determination and utilization. C. J. Lu *et al.* (Abs.) 243
– in evaporator. A. M. Kozak and V. A. Solomykin. (Abs.)..... 279
economy in beet sugar factory. P. Freund. (Abs.) 117, 340, 374
effect on white sugar solutions. S. Hase *et al.* (Abs.)..... 346
enthalpy balance of a sugar dryer. J. Turcaj and L. Neužil. (Abs.).. 118
exchanger blockage detection. (T.N.) 350
– incondensables removal. B. B. Paul. (Abs.) 115
– spiral. M. Dumis. (Abs.)..... 280
– tube flaw measurement. S. R. Durrell. (Abs.) 21
losses. W. von Proskowetz. (Abs.) 54
– in steam expansion. V. Sázavsky 86
stability of juice after ion exchange treatment. L. N. Dobrovol'skaya *et al.* (Abs.) 148
sucrose crystallization thermography. A. V. Zubchenko and S. E. Kharin. (Abs.) 346
– decomposition in sugar solution. L. I. Trebin *et al.* (Abs.)..... 183
transfer in boiling. N. A. Shevandin 246
– effect of evaporator juice level and Brix. J. Závorka *et al.* (Abs.).. 211
– – – tube length. N. Y. Tobilevich *et al.* (Abs.) 149
– – vibrations. D. E. Sinat-Radchenko and V. D. Popov.... 184
– in laboratory evaporator. J. B. Cordiner *et al.* (Abs.) 90
– to sugar solution. N. Y. Tobilevich *et al.* (Abs.) 184
see also Steam
Hodag Chemical Corp. Mexican subsidiary. (Brev.) 189
Holland sugar industry. C. F. Roosenschoon. (Abs.) 23
Honduras: Villanueva and San Matilde sugar factories. J. M. Santiago.. 85
Hong Kong sugar statistics 1969..... 351

PAGE

Hungary: sugar exports 1969. (Brev.) 288
– industry. L. Nagy. (Abs.)..... 279
– production 1969/70. (Brev.)..... 159
waste water disposal. I. Radics..... 311
– – storage at Selyp. K. Hangyál 54
– – treatment and water economy. K. Hangyál. (Abs.)..... 340
Hydrocyclone milk-of-lime treatment. S. C. Gupta *et al.* (Abs.) 145
– water and waste water treatment. A. M. Fominykh. (Abs.)..... 149

Iceland sugar imports 1969. (Brev.) 256
Icing sugar: micro-organisms. L. Vokounová. (Abs.) 215
particle size distribution determination. E. A. Niediek. (Abs.)..... 184
production standards. M. Gawrych 54
India: beet agriculture. P. S. Gill. (Abs.) 276
– – S. C. Sharma. (Abs.)..... 209
beet-and-cane sugar factory. (Brev.) 128
– leaf spot fungi. A. N. Mukhopadhyay. (Abs.)..... 276
– sugar manufacture. S. C. Gupta *et al.* (Abs.) 117
– – – V. S. Sud. (Abs.).....19, 179
– varietal trials. P. S. Deshpande and N. G. Perur. (Abs.) 369
– – – V. P. Valdya. (Abs.)..... 276
Bihar sugar industry. P. L. Dhanuka 174
borer parasite. A. N. Kalra *et al.*.... 175
cane agriculture. V. S. Bhide. (Abs.) 16, 79
– diseases. S. K. Ruikar and G. K. Patwardhan. (Abs.)..... 206
– – S. S. Sandhu *et al.* (Abs.)..... 80
– grub. K. M. Gupta *et al.* (Abs.).. 46
– intercropping. P. S. Gill. (Abs.).. 175
– – with groundnuts. K. K. P. Rao and M. Rao. (Abs.)..... 206
– irrigation. R. R. Chaudury. (Abs.) 15
– – and fertilizer trials. T. R. Srinivasan and A. Mariakulandai. (Abs.)..... 241
– molasses purity. B. Chakravarty and S. Singh. (Abs.)..... 120
– mosaic. M. L. Seth. (Abs.)..... 13
– planting experiments. R. R. Panje *et al.* (Abs.) 273
– ratoon stunting disease. G. R. Singh and M. M. Rao. (Abs.).. 241
– rust control. S. K. Ruikar and S. B. Deshpande. (Abs.)..... 207
– variety disease resistance. M. R. Kelkar. (Abs.) 14
– – nitrogen response. I. J. Singh and P. P. Singh..... 167
– weeds. R. P. Singh and I. D. Verma. (Abs.) 173
clarification. D. P. Sanjana *et al.*... 20
Co 6911 cane variety. N. K. Parik 175
DDS cane diffusion. D. P. Kulkarni and J. R. Unde. (Abs.) 308
– – – K. H. Parekh and D. J. Mehta 116
fertilizer trials. G. N. Misra. (Abs.) 14
– – S. S. Saini *et al.* (Abs.)..... 80
– – J. M. Sharma *et al.* (Abs.).... 80
International Sugar Agreement quota 288
leaf hopper damage. S. C. Gupta and A. P. Gupta. (Abs.) 175
– miner control. V. G. Rajani *et al.* 14
new sugar factories. (Brev.) 203, 288
nitrogen and phosphorus fertilizer trials. B. Singh and A. N. Verma 173
Parasa bicolor pest. H. Singh and S. P. Sharma. (Abs.) 206
phosphate fertilizer research. K. V. Joshi. (Abs.) 206
pink mealy bug. J. M. Satpathy and R. K. Das. (Abs.) 46
sugar factory strike call. (Brev.) .. 96
– – technology. R. N. Agarwal.... 177
– – – M. Mohan. (Abs.)..... 177
– – – W. S. Warrier. (Abs.)..... 244
– – – and cane agriculture. S. C. Sharma. (Abs.)..... 177
– industry nationalization commission. (Brev.)..... 352
– production. (N.C.)..... 66
Indonesia: centrifugal order. (Brev.).. 222
project for American Factors Associates. (Brev.) 192
sugar factory construction resumption. (Brev.) 198
– industry. H. J. Delavier and H. Hirschmüller. (Abs.)..... 210
– – –. Mubyarto. (Abs.)..... 145

INDEX

PAGE

Instruments: boiling. V. D. Diwan .. 309
density meter. (T.N.) 94
electronic kits. (T.N.)..... 62
flow meter. (T.N.)..... 286
lens cleaning. (T.N.)..... 94
maintenance and repair. F. le Guen 20
measuring. (T.N.) 254
Mexican sugar factory. O. Hernández R. (Abs.)..... 277
polarimeter. (T.N.) 318
– quartz plate rotation dispersion. R. Bünnagel and F. Spiegelhalter. (Abs.)..... 345
temperature indicator. (T.N.)..... 286
tube flaw measurement. S. R. Durrell 21
see also Brix; Colour; Control, Automatic; Flow; Level; pH; Polarization; Refractometer; Viscosity; Water; *etc.*
International Commission for Uniform Methods of Sugar Analysis: 15th Session 1970 .....63, 199
– – referees' recommendations 231, 259, 288
US National Committee meeting.... 160
International food exhibitions in France. (Brev.)..... 160
International Society of Sugar Cane Technologists: 13th Congress Proceedings. K. C. Liu. (N.B.)..... 56
– 14th Congress..... 128, 159, 191, 351
International Sugar Agreement: Council meeting. (N.C.) 1, 66, 129, 193, 322
Dominican Republic quota. (Brev.) 352
Indian quota. (Brev.) 288
members and quotas 1970. (N.C.).. 34
quotas 1970. (N.C.) 225, 257, 289, 353
Thailand accession. (Brev.) 32
see also International Sugar Organization
International sugar economic yearbook and directory. H. Ahlfeld. (N.B.) 26
International Sugar Journal Panel of Referees 287
International Sugar Organization yearbook 1968. (N.B.)..... 151
International Sugar Research Foundation Inc. (N.C.)..... 161
research symposium. (N.B.) 249
– on tooth decay. (Brev.)..... 288
International Sugarmark. (N.C.)..... 33
International, *see also* World
Invert sugar: absorbancy. K. W. R. Schoenrock. (Abs.) 345
automatic measurement. A. J. Ancona *et al.* (Abs.) 215
decomposition in heated solutions. V. A. Kolesnikov *et al.* (Abs.)..... 28
– products spectra. A. R. Sapronov and K. N. Dunaeva. (Abs.).... 282
determination. F. Tödt and J. G. Abraham. (Abs.) 22
effect on sucrose crystallization rate. B. Shamirian. (Abs.) 314
– sulphitation. H. Polleres. (Abs.) 310
production. R. E. Abbott. (Pat.).. 317
– R. Kunin. (Abs.) 177
solution colour formation rate. A. R. Sapronov. (Abs.) 153
– density. P. X. Hoynak and G. N. Bollenback. (N.B.) 151
– dextrose and levulose recovery. K. Lauer. (Pat.) 348
see also Reducing sugars *and* Sugars
Ion exchange. F. Perschak. (Abs.).. 373
J. F. Zievers and C. J. Novotny.... 181
amino-acids separation from distillery waste. K. A. Prabhu and R. M. Maithani. (Abs.)..... 120
ammonia recovery from effluent after cane juice treatment. S. Mukherjee *et al.* (Abs.)..... 370
beet juice treatment. (T.N.) 62
– – – S. E. Bichsel and D. A. Hoover 246
– – – P. Devilliers and M. Loilier.. 180
– – – J. Elmer *et al.* (Abs.)..... 214
– – – W. Haberich and E. H. G. Felber. (Pat.) 187
– – – P. Kadlec and J. Buriánek.. 373
– – – F. Perschak and H. Klaushofer. (Abs.)..... 212
– – – M. Sugawara and K. Yamamoto. (Abs.) 340
– – – and boiling efficiency. E. Felber. (Abs.) 179
– – – for pH control. J. F. T. Oldfield *et al.* 323, 355
– – – and thermal stability. L. N. Dobrovol'skaya *et al.* (Abs.) 148
– molasses treatment. L. Gulminelli 55
– – – P. Kadlec and J. Buriánek .. 373
– – – H. Neumann. (Abs.) 118

PAGE

Ion exchange: beet molasses treatment. F. Perschak. (Abs.) 247
– syrup treatment. A. P. Kozyavkin *et al.* (Abs.)..... 179
– – – and betaine losses. K. P. Zakharov *et al.* (Abs.) 92
betaine and glutamic acid recovery from beet molasses. I. P. Chernikova. (Abs.) 185
browning product separation from beet juice. E. Steineck. (Abs.).. 314
cane juice and refinery liquor treatment. A. Miyahara. (Abs.)..... 248
– molasses treatment. Anon. (Abs.) 347
– – – H. J. von der Linde and W. Haberich. (Pat.) 317
– syrup treatment. S. C. Gupta *et al.* 116
colour measurement in beet juice, molasses and raw sugar. I. F. Bugaenko *et al.* (Abs.)..... 282
– removal 303
dextrose and levulose recovery. K. Lauer *et al.* (Pat.)..... 348
juice and syrup treatment. R. Kunin 177
kinetics, effect of sucrose. V. P. Meleshko and M. V. Rozhkova .. 180
laboratory column scale-up. D. F. Bagster 134
lactic acid determination in beet juice. J. F. T. Oldfield and M. Shore 3
– – – J. F. T. Oldfield *et al.* 35
refinery liquor colour analysis..... 303
– – treatment. N. A. Arkhipovich and B. A. Kutsenko. (Abs.) 88
– – – D. F. Bagster..... 200
– – – K. Čížek. (Abs.) 343
– – – T. Ionescu and F. Domsa..181, 343
– – – Y. Ito *et al.* (Abs.) 24
– – – S. Z. Ivanov and G. A. Chikin 150
– – – P. Kadlec and J. Buriánek. 367
– – – R. Kunin. (Abs.)..... 177
– – – R. Kunin and F. Pollio. (Abs.) 181
– – – and refined sugar purity. T. A. Klochkova and T. A. Balashova. (Abs.)..... 24
– – – sugar contamination. N. K. Kvacheva. (Abs.) 342
resin active carbon/adsorbent mixtures for colour removal. B. N. Dickinson and H. E. Barrett.(Abs.) 281
– damage during syrup decolorization. G. A. Chikin *et al.* (Abs.) 217
– filter precoat removal. Union Tank Car Co. (Pat.)..... 58
– macroreticular. G. Assalini. (Abs.) 55
– properties determination. R. D. Moroz and J. P. Sullivan. (Abs.) 216
– regeneration. O. Miagkoy *et al.* .. 338
– for sugar solution decolorization. I. M. Abrams. (Abs.) 281
– – – I. K. Suzuki *et al.* (Abs.)..... 342
– working cycle calculation. G. A. Chikin and G. N. Tyuleneva.. 248
sugar solution treatment. (T.N.).. 62
– – – S. A. Brenman *et al.* (Abs.).. 88
waste water treatment. K. H. F. Mehls. (N.B.) 26
water treatment. (T.N.) 286
see also Chromatography *and* Electrodialysis
Ion exclusion: phase equilibria for sucrose-NaCl-water-resin. D. N. Sutherland and C. B. Mountfort 27
Iran: Mamassani sugar factory. Anon. 245
– sugar factories. M. Monazahian.. 279
Iraq: cane sugar factory start. (Brev.) 224
Iron: corrosion, effects of non-sugars. W. Braunsteiner. (Abs.)..... 314
determination in beet juice. G. Forster. (Abs.) 313
– – – W. Wruss. (Abs.)..... 314
factory applications and properties of cast iron. W. N. Bysantson.. 84
– – of stainless steels. H. A. Curwen 370
– – steels. J. M. Wagenet. (Abs.) 85
see also Ash
Irrigation: in Australia. Anon. (Abs.) 140, 141
beet yield in sandy soil. E. von Boguslawski and R. Schildbach.. 51
cane flowering. A. M. Malukara and N. D. Yusuf. (Abs.)..... 275
– response, effect of water table. M. B. Tippannavar and M. G. Reddy. (Abs.) 111
– water requirements. G. J. Ham 305
– – – in Australia. Anon. (Abs.).. 204
– – stress effects. U. S. Singh and V. S. Negi. (Abs.)..... 48
conservation irrigation. S. M. Viscasillas. (Abs.) 208

PAGE

Irrigation:
in Costa Rica. S. A. Gavande and M. A. Gonzalez. (Abs.) 305
and fertilizer response. R. Ricaud 111
– – in India. T. R. Srinivasan and A. Mariakulandai. (Abs.).. 241
India. R. R. Chaudury. (Abs.).... 15
Jamaica. M. E. A. Shaw. (Abs.).. 140
overhead, fertilizer effect on beet. L. Hájek. (Abs.) 51
– in Jamaica. N. J. Chin. (Abs.).. 140
– Puerto Rico. E. S. Williams..174, 239
– US. D. W. Henderson *et al.* (Abs.) 82
in Rhodesia. Anon. (Abs.)..... 13
– K. C. Leverington. (Abs.)..... 241
tests in South Africa. G. D. Thompson and J. P. Boyce. (Abs.).... 49
Tunisia project. (Brev.)..... 256
in US and Bahamas. F. Delgado. 239
water flow control. W. O. Gibson 188
– – – W. M. Redditt. (Pat.)..... 187
Israel: sugar imports 1969. (Brev.).. 351
– industry. H. J. Delavier and H. Hirschmüller. (Abs.)..... 374
– situation. (Brev.)..... 98
Italy: beet *Cercospora* control. F. Koch and E. Schröter. (Abs.)..... 307
– disease and pest control mechanization. A. G. Gallarate. (Abs.) 337
– production 1969. (Brev.)..... 78
cane varietal trials in Sicily. B. Sarno. (Abs.)..... 79
chemical weed control. G. Covarelli 19
Ivory Coast sugar project. (Brev.).. 352

Jaggery, *see* Gur
Jamaica: Booker McConnell Ltd. report 1969. (N.C.) 258
Bybrook distillery. Z. Bacchus and E. Elliot. (Abs.) 185
cane rotation with Pongola grass. T. Chinloy and B. M. Hogg. (Abs.) 140
– standover. (Brev.)..... 32
– varieties. M. D.S.Richards. (Abs.) 111
irrigation. M. E. A. Shaw. (Abs.).. 140
– N. J. Chin. (Abs.)..... 140
soil micro-organisms. B. M. Robison. (Abs.)..... 366
Sugar Control Authority. (Brev.).. 224
– factory closure. (Brev.)..... 64
– industry improvement measures.. 108
– price reduction under the Commonwealth Sugar Agreement. (Brev.) 384
West Indies Sugar Co. Ltd. cane land negotiations. (Brev.) 352
– – – report 1969. (N.C.)..... 130
Japan: beet sugar production 1969/70 352
bone char kiln. T. Oyama. (Abs.).. 342
cane pest. M. Shibuya and A. Tanaka 45
liquid sugar manufacture. (Brev.).. 64
refineries. T. Yamane. (Abs.).... 88
sugar imports. (Stat.)..... 288
Juices: filtration curve determination. O. Argudín and J. Caba. (Abs.) 283
heaters, spiral type. M. Dumis. (Abs.) 280
– stainless steel *vs.* copper tubes. J. A. Cotner. (Abs.)..... 146
– tube corrosion resistance. G. Trabanelli *et al.* (Abs.)..... 373
– – descaling. (T.N.) 222
ion exchange treatment. (T.N.)..... 62
purity rise in evaporation. R. C. Bhandari. (Abs.) 339
treatment. F. G. Lippe and F. Suppan. (Pat.)..... 316
weigher. E. R. Erdmann. (Abs.).. 23
– J. R. Harel. (Abs.)..... 211
Juice, Beet: active carbon treatment. J. P. Cahen and A. Giglio. (Abs.) 373
– – – S. Zagrodzki *et al.* (Abs.).... 55
ash determination. T. D. Carpenter and S. E. Bichsel. (Abs.)..... 345
browning products. E. Steineck.. 314
calcium salts determination. V. V. Zlaman. (Abs.) 377
colloidal matter determination. R. Bretschneider *et al.* (Abs.)..... 119
colour measurement. I. F. Bugaenko *et al.* (Abs.)..... 282
electrodialysis. K. Čížek and V. Čejková. (Abs.)..... 212
– P. Kadlec and J. Buriánek. (Abs.) 373
flow and Brix measurement. W. Grasmann and O. Parisek. (Abs.) 148
foam prevention. R. Bretschneider *et al.* (Abs.) 86
formaldehyde determination. F. Hollaus and G. Pollach. (Abs.).. 314

INDEX

PAGE

Juice, Beet:
ion exchange treatment. (T.N.).... 62
- - - S. E. Bichsel and D. A. Hoover 246
- - - P. Devilliers and M. Loilier.. 180
- - - J. Elmer *et al.* (Abs.)..... 214
- - - W. Haberich and E. H. G. Felber. (Pat.)..... 187
- - - R. Kunin. (Abs.)..... 177
- - - F. Perschak and H. Klaushofer. (Abs.) 212
- - - M. Sugawara and K. Yamamoto. (Abs.) 340
- - - and boiling efficiency. E. Felber. (Abs.)..... 179
- - - for pH control. J. F. T. Oldfield *et al.* 323, 355
- - - and thermal stability. L. N. Dobrovol'skaya *et al.* (Abs.) 148
iron determination. G. Forster.. 313
- - W. Wruss. (Abs.)..... 314
lactic acid determination. J. F. T. Oldfield and M. Shore 3
- - - J. F. T. Oldfield *et al.* 35
- - - V. Prey and H. Polleres .. 184
liming temperature and colour in evaporation. H. Zaorska and S. Zagrodzki. (Abs.) 280
melanoidin formation and peptide determination. G. Petershofer.. 314
micro-organisms. I. Januszewicz and K. Mossakowska. (Abs.)..... 180
- F. Schneider. (Abs.)..... 117
nitrate determination. C. Reichel.. 28
osmolality and beet sucrose content. A. E. Goodban and R. M. McCready. (Abs.) 89
peptide determination. V. Prey and G. Petershofer. (Abs.) 152
pH and colour. N. Kubadinow.. 313
- temperature. V. A. Maksyutov and V. A. Kolesnikov. (Abs.).... 282
polysaccharide enzymatic hydrolysis. R. Bretschneider and J. Čopíková 215
proportioning meter. V. V. Zlaman 22
purity and factory heat economy. P. Freund. (Abs.) 117
quality, effect of beet topping. L. Wieninger and N. Kubadinow... 310
raw juice storage. R. Bretschneider *et al.* (Abs.) 376
standard liquor storage. L. R. Lott and G. R. Hales. (Abs.)..... 87
thick juice electrodialysis. I. F. Zelikman *et al.* (Abs.)..... 23
- - pH and pOH in evaporation. V. A. Pronina and S. Z. Ivanov. (Abs.) 282, 341
- - storage. R. Hurasky. (Abs.).. 371
- - - M. Škrábal. (Abs.)..... 23
see also Carbonatation *and* Heat exchangers
Juice, Cane: alcohol fermentation. O. Valsechi. (Abs.)..... 92
bactericide treatment. C. K. Cloninger and F. T. Corradini. (Abs.) 277
- G. A. Trautenberg. (Abs.)..... 85, 243
bagasse fines, effect of milling. L. D. Díaz L. (Abs.)..... 243
Brix, pol and purity relationships in milling. J. J. Gómez. (Abs.).... 183
by-products. A. Diokno. (Abs.).. 315
calcium reduction. J. Casey. (Abs.) 210
continuous analysis. Hawaiian Development Co. (Pat.)..... 93
- - G. E. Sloane and K. M. Onna 188
deaeration. S. C. Gupta *et al.* (Abs.) 145, 177
dissolved starch and flotation. P. A. Prince. (Abs.) 84
heater efficiencies. S. K. Saraph.. 308
invert syrup production. O. Valsechi 92
ion exchange treatment. A. Miyahara 248
- - - and ammonia recovery from resin effluent. S. Mukherjee *et al.* (Abs.) 370
lime addition and pH. E. C. Vignes 147
- proportioning. J. R. Mody. (Abs.) 145
pH, effect of heating. V. Potrojov and S. Morales. (Abs.)..... 376
- - prelming. T. K. Mukerjee .. 115
phosphate determination. P. C. Ivin 57
sampler. S. C. Jaggi. (Abs.)..... 85
sampling in Australia. (Brev.).... 96
starch hydrolysis. J. Bruijn and R. P. Jennings. (Abs.)..... 84
- - with enzyme. (T.N.)..... 285
sugar yield calculation. E. R. de Oliveira. (Abs.)..... 28
yeast fermentation. P. R. Cantarelli and J. G. B. Caruso. (Abs.).... 29
see also Clarification *and* Heat exchangers

PAGE

Juice, Sorghum: starch removal. B. A. Smith. (Pat.).....124, 188

Kenya cane smut. J. M. Walker. (Abs.) 13
- sugar expansion. (Brev.)..... 192
Kestose: determination in sucrose solutions. G. Saglietto and G. Mantovani. (Abs.)..... 345
- formation from sucrose. H. Bourzutschky and W. Mauch. (Abs.).... 284

Lactic acid: determination in beet juice. V. Prey and H. Polleres.. 184
- - - and molasses. J. F. T. Oldfield *et al.* 35
- - sugar products. J. F. T. Oldfield and M. Shore..... 3
and iron corrosion. W. Braunsteiner 314
Lead determination in white sugar. W. Mauch *et al.*(Abs.) 251
Level: automatic control. (T.N.) 30, 62, 350
- - in evaporator. M. Bosnjak.... 235
- - - R. de la Torre. (Abs.)..... 150
evaporator heat transfer. J. Závorka *et al.* (Abs.)..... 211
- juice colour. H. Zaorska and S. Zagrodzki. (Abs.) 215, 217
indicator. (T.N.)..... 61
juice and CO_2 utilization in carbonatation. L. G. Vorona *et al.*.. 279
measuring equipment for bulk storage. W. Weilandt. (Abs.)..... 311
vacuum pans. A. R. Grandadam.. 341
Levulose: determination in sugars. H. Bourzutschky and W. Mauch .. 283
recovery from sucrose-invert solution. K. Lauer *et al.* (Pat.)..... 348
see also Invert sugar; Reducing sugars *and* Sugars
F. O. Licht's Internationales Zuckerwirtschaftliches Jahr- und Adressbuch 1969. H. Ahlfeld. (N.B.).. 26
Lime: addition and juice pH. E. C. Vignes. (Abs.)..... 147
colloid coagulate size in raw juice. J. Bartsch. (Abs.)..... 310
kilns. (T.N.) 62
- charging. M. Czirfusz. (Abs.).. 371
- - G. A. Mikuia and E. V. Oleinik 280
- operation. Y. Ayhan. (Abs.).... 118
milk-of-lime dosing. J. R. Mody.. 145
- - - V. V. Zlaman. (Abs.)..... 22
- - hydrocyclone treatment. S. C. Gupta *et al.* (Abs.)..... 145
- - treatment of beet flume-wash water. Z. Zingel'. (Abs.).. 372
- - weighing. A. A. Rozinskii and V. I. Kostyuk. (Abs.)..... 87
recovery from carbonatation mud and re-utilization. V. Bizau. (Abs.) 212
stone consumption in Turkey. P. Güray. (Abs.)..... 246
- and kiln fuel handling. A. A. Kukharskii and A. N. Botin.. 280
sucrose decomposition. F. Schneider *et al.* (Abs.)..... 283
see also Ash
Liming, *see* Carbonatation *and* Clarification
Liquid sugar: densities. P. X. Hoynak and G. N. Bollenback. (N.B.).. 151
production from cane molasses. Anon. 347
- - - H. J. von der Linde and W. Haberich. (Pat.) 317
- in Japan. (Brev.)..... 64
- from molasses. F. Perschak. (Abs.) 247
Losses: beet campaign length. E. F. Kazakov. (Abs.) 247
- diffusion disinfection. A. Simonart 117
- - effect of press water recycling. H. Geien. (Abs.)..... 118
- - - E. Slavíček and K. Sekl 149
- downy mildew effects. J. Zdárský 152
- hail damage. O. Neeb and C. Winner. (Abs.)..... 307
- virus yellows, effect of nitrogen. R. T. Lewellen *et al.* (Abs.).. 337
in burnt cane. G. Samuels and A. Cayere. (Abs.) 239
calculation in beet. A. Y. Zagorul'ko *et al.* (Abs.) 372
cane borer infestation in Louisiana. L. J. Charpentier *et al.* (Abs.).. 17
- deterioration after harvesting... 304
- - - Anon. (Abs.) 16
- - - J. Bruijn..... 195
- - - B. T. Egan. (Abs.).....142, 205
- - - D. H. Foster. (Abs.) 21, 141

PAGE

Losses: cane deterioration after harvesting. A. P. Gupta *et al.* (Abs.).. 111
- - - M. Pineda L. (Abs.)..... 306
- - - S. M. Rodríguez S. (Abs.).. 211
- - - G. R. Serbia. (Abs.)..... 183
- - - A. Velasco P. and A. Rueda R. (Abs.)..... 178
- - - R. P. Vickers and L. P. Schafer. (Abs.) 47
- diffusion. J. Palaci. (Abs.)..... 370
- juice bactericide. C. K. Cloninger and F. T. Corradini. (Abs.).... 277
- - - G. A. Trautenberg. (Abs.)..85, 243
- leaf hopper damage in India. S. C. Gupta and A. P. Gupta. (Abs.) 175
- milling. L. N. Gibe. (Abs.).... 244
- - E. C. Vignes and M. Randabel 147
- molasses, reduction by clarification with phosphoric acid. T. T. Oommen and B. S. Gurumurthy 115
- rat damage in Hawaii. Anon... 17
in filter-cake. F. Plasencia G. and J. A. García G. (Abs.)..... 338
mechanically-harvested beet. E. Swietlicka. (Abs.)..... 51
- thinned beet. L. F. Hanbury.. 50
by microbial action in a refinery. R. D. Skole *et al.* (Abs.)..... 184
in stored beet. M. Dambroth. (Abs.) 372
- - P. Devillers. (Abs.)..... 180
- - A. Graf. (Abs.)..... 310
- - L. D. Kazenas. (Abs.)..... 55
- - J. F. T. Oldfield and J. V. Dutton 209
- - S. Peičiarić and M. Milić. (Abs.) 279
- - W. Trzciński and J. Malec... 86, 280
- - M. M. Vissarionov and K. G. Teregulov. (Abs.)..... 279
- - M. I. Zhigailo. (Abs.)..... 55
- - reduction with moist air. V. Z. Zhadan *et al.* (Abs.)..... 87
- - - pile covers. W. Trzciński and J. Malec. (Abs.)..... 86
sucrose decomposition in boiling. L. I. Trebin *et al.* (Abs.)..... 153
- - effect of lime. F. Schneider *et al.* 283
undetermined. A. C. Chatterjee.. 146
- D. Suerte. (Abs.)..... 178
waste water. Svenska Sockerfabriks AB. (Pat.) 58
see also Bagasse; Filter cake; Molasses *and* Pulp, Beet
Lubrication: beet diffuser. E. S. Finskii. (Abs.) 149

Magnesium: determination in beet molasses. I. Herineanu *et al.* (Abs.) 251
- yeasts. J. R. Biart and H. Pérez 377
fertilizers for beet. A. P. Draycott and M. J. Durrant. (Abs.)..... 143
oxide in clarification. (T.N.)..... 30
- - O. Argudín. (Abs.)..... 114
- - C. M. Madrazo. (Abs.)..... 210
- - V. Potrojov and S. Morales .. 376
Maintenance: beet harvesters. R. Fogg and J. J. Niederer. (Abs.)..... 18
fuel gas for welding. T. J. Grippen 85
laboratory instruments. F. le Guen 20
organization. F. W. Mayer. (Abs.) 372
piping. E. S. Zhalov. (Abs.)..... 179
steam turbines. J. R. Siekert. (Abs.) 85
Malawi: sugar production. (Brev.) .. 383
- yellow wilt disease. M. A. Siddiqi 274
Malaysia: new sugar factory.. 64, 94, 189
sugar expansion prospects. (Brev.) 169
- imports. (Stat.)..... 256
Massecuite: apparent crystal volume. R. N. Agarwal. (Abs.)..... 115
Brix calculation. T. P. Khvalkovskii 372
crystal content determination. Hawaiian Development Co. (Pat.).. 220
- size distribution. P. G. Wright and E. T. White. (Abs.)..... 89
dilution. T. Méndez C. (Abs.)..... 309
electrical reheating. J. R. Harel.. 338
heating, effect of vibrations. D. E. Sinat-Radchenko and V. D. Popov 184
needle-shaped crystal formation. M. Kamoda *et al.* (Abs.) 376
optimum cooling and curing temperature. D. E. Sinat-Radchenko and V. D. Popov. (Abs.)..... 212
polarization, effect of unfermentable reducing matter. J. P. Shukla and R. M. Maithani. (Abs.) 120
rheological and circulation properties. Y. G. Artyukhov and V. T. Garyazha. (Abs.) 89

INDEX

PAGE

Massecuite: rheological properties. Y. D. Kot and E. M. Glygalo. (Abs.) 28
sampler. N. C. Varma *et al.* (Abs.) 145
stirring in vacuum pans. J. Blaude 87
surface-active agent treatment. Anon. 178, 304
– – – Fabcon Inc. (Pat.)..... 125
– – – J. R. Gomeri and A. M. Alcala 244
– – – C. M. Madrazo. (Abs.)..... 178
– – – H. L. Sanders. (Pat.)..... 316
– – – K. A. Shah *et al.* (Abs.)..... 308
– – – D. Tanco. (Abs.)..... 178
yield calculation. E. D. Jensen.. 52
see also Boiling; Centrifugals; Crystallization *and* Pans, Vacuum
Mauritius: bagasse board plant. (Brev.) 382
bulk handling study. (Brev.)..... 383
cane research. (F.N.H.)..... 138
cyclone damage. (Brev.)..... 192
mill roller casting. R. Hardy. (Abs.) 338
sugar factory closure. (Brev.)..... 64
– – instruments maintenance. F. le Guen. (Abs.)..... 20
– – performances. J. Dupont de R. de St. Antoine. (Abs.)..... 147
– production and disposal 1969 .. 95
tea growing on cane lands. H. G. S. Ramlogun. (Abs.)..... 140
Mechanization, Beet. Anon. (Abs.).. 143
automatic thinner in USSR. (Brev.) 64
cleaner. Ernest A. Webb Ltd. (Pat.) 60
dusting and spraying equipment in Italy. A. G. Gallarate. (Abs.).. 337
harvester. Anon. (Abs.) 50
– E. Ballignand. (Pat.)..... 188
– Dnepropetrovsky Zavod Selskokhozaistvennogo Mashinostroenia 219
– E. C. Rollins. (Pat.) 124
– F. A. Standen & Sons Ltd. and P. Standen. (Pat.)..... 349
– H. Verhaeghe. (Pat.)..... 349
– E. Weichel. (Pat.) 122
– elevator. A. G. Barows *et al.* (Pat.) 124
– maintenance. R. Fogg and J. J. Niederer. (Abs.)..... 18
– row finder. N. E. Wells. (Pat.).. 187
– speed and beet topping. J. A. Wayman and G. L. Maughan.. 242
harvesting and beet damage. E. Swietlicka. (Abs.)..... 51
– in France. R. Boiteau *et al.* (Abs.) 143
– planning. F. B. Russell. (Abs.).. 18
– in Switzerland. H. Meyer. (Abs.) 50
herbicide effect. O. S. Rose. (Abs.) 112
loading in UK. Anon. (Abs.)..... 50
seed drill. (T.N.)..... 30
– – trials. G. Baraldi and E. Francia 307
spring work. M. Martens. (Abs.).. 82
thinner. M. W. Aldous and J. C. Hitchcock. (Pat.) 59
– F. O. Daellenbach. (Pat.)..... 157
– Deere & Co. (Pat.)..... 125
– D. H. Gompert. (Pat.)..... 188
– H. Gugenhan and A. Gego. (Pat.) 187
– I. D. Petz. (Pat.)..... 187
– Precision Agricultural Machinery Co. (Pat.) 156
– C. D. Zanche. (Abs.) 307
thinning. G. Baraldi and G. Viroli 276
– M. Dambroth. (Abs.)..... 369
– J. Tschudy. (Pat.)..... 187
– effect of seed rate. L. F. Hanbury 50
topper. R. N. Burns and T. E. Wulf 124
topping and harvesting in Denmark. S. Olen. (Abs.)..... 276
UK demonstrations. (Brev.)..... 32
– – Anon. (Abs.) 18, 19, 337
US harvester manufacturer. (Brev.) 126
Mechanization, Cane: cane leaf stripper. Anon. (Abs.)..... 204
demonstration in South Africa. Anon. 306
effect on soil. D. S. Boyce. (Abs.).. 239
harvester. (T.N.) 285
– Anon. (Abs.)..... 109
– V. P. Broussard. (Pat.)..... 348
– H. J. Chauffe. (Pat.)..... 186
– J. E. Clayton. (Abs.)..... 110
– K. T. Driller. (Pat.)..... 348
– Massey-Ferguson (Australia) Ltd. 60
– J. P. Sexton 187, 368
– H. Tolar. (Pat.) 187
– L. G. Vallance. (Abs.)..... 204
– A. K. Vyaznikov *et al.* (Pat.).. 157, 316
– and conditioner. (Brev.)..... 287
– topper. D. J. Quick. (Pat.)..... 188
– – J. Zagorski and E. W. Wright 316
harvesting. S. W. D. Baxter. (Abs.) 207
– C. W. Hart. (Pat.)..... 316
– in Australia. Anon. (Abs.)..... 175
– – L. G. Vallance. (Abs.)..... 173
– hazards. Anon. (Abs.) 205

PAGE

Mechanization, Cane:
harvesting in Mexico. Anon. (Abs.) 141
– – D. Siller y Siller. (Abs.)..... 111
– in Puerto Rico. F. Carreras. (Abs.) 208
– – – F. Delgado F. (Abs.)..... 208
– – – F. Delgado F. *et al.* (Abs.).. 335
– – – T. Ruiz M. (Abs.)..... 208
– – – J. Sánchez D. (Abs.)..... 208
– – – H. A. Willett. (Abs.)..... 207
– – – J. Zabata C. (Abs.)..... 208
– recumbent cane. J. E. Clayton and H. D. Whittemore. (Abs.) 110
– seed cane. Anon. (Abs.)..... 367
– in South Africa. G. S. Bartlett 173
loader. (T.N.) 382
multi-row equipment. E. H. Graugnard. (Abs.) 15
planter. J. G. Arceneaux. (Pat.).. 157
– J. J. Colletti. (Pat.)..... 188
– S. E. Longman. (Pat.)..... 188
ploughing in Philippines. F. E. Mercado. (Abs.)..... 240
ratoon stoollifting and transplanting. T. W. Casselman and F. le Grand 15
in Taiwan. W. C. Hsu. (Abs.).... 306
US and Bahamas. F. Delgado .. 239
Mexico: bagasse digester. (Brev.) 30
– paper factory. (Brev.)..... 203
– – – Anon. (Abs.) 284
cane agriculture. A. González G..... 111
– – D. Ontiveros H. (Abs.) 275
– – B. Ortiz V. (Abs.)..... 141
– diseases and pests. S. Flores C... 111
– mechanical harvesting. Anon. .. 141
– – – D. Siller y Siller. (Abs.) 111
– varietal differences in deterioration after harvesting. M. Pineda L. (Abs.)..... 306
fertilizers. B. Ortiz V. (Abs.)..... 111
food technologists' association congress. (Brev.)..... 32
Hodag Chemical Corp. subsidiary.. 189
reduced cane yields. D. Ontiveros H. 46
refinery liquor decolorization with granular carbon. F. M. Williams 181
sugar consumption 1969. (Brev.) .. 272
– exports 1969. (Brev.)..... 352
– factory instruments. O. Hernández R. (Abs.)..... 277
– production 1968/69. (Brev.) 64
– – 1969/70. (Brev.) 351
weed control. S. Luján C. (Abs.) .. 111
Micro-organisms: antiseptic for alcohol production from molasses. T. P. Slyusarenko and E. P. Vitukevich 347
in beet. F. Schneider *et al.* (Abs.).. 184
– diffuser disinfection. A. Simonart 117
– juices. I. Januszewicz and K. Mossakowska. (Abs.) 180
continuous culture. G. Pollach. (Abs.) 314
control in standard liquor storage. L. Lott and G. R. Hales. (Abs.).. 87
determination in press water and raw juice. E. A. Khodurskii and N. S. Chechel'. (Abs.) 217
development in beet seedling rhizosphere. P. Gyurko. (Abs.) 51
– – and water. F. Schneider. (Abs.) 117
disinfectant. J. Casey. (Abs.)..... 210
– C. K. Cloninger and F. T. Corradini 277
– Diversey Ltd. (Pat.)..... 93
– L. N. Gibe. (Abs.)..... 244
– G. A. Trautenberg. (Abs.)..... 85, 243
formalin distribution in beet diffusion. F. Hollaus. (Abs.)..... 310
Leuconostoc mesenteroides and cane deterioration. 304
– – – B. T. Egan. (Abs.) 142
Polish sugar. I. Januszewicz and K. Mossakowska. (Abs.)..... 280
polysaccharide-producing bacteria. F. Schneider *et al.* (Abs.) 216
press water treatment. O. Vejbora *et al.* (Abs.) 340
protein production..... 304
refined sugar. L. Vokounová. (Abs.) 215
refinery. R. D. Skole *et al.* (Abs.).. 184
soil in Jamaica. B. M. Robison. (Abs.) 366
in stored beet. Y. S. Toporovskaya 311
– sugar. Y. Saray. (Abs.)..... 87
sugar microbiology seminar in Morocco. (Brev.)..... 63
see also Diseases; Fermentation; Losses *and individual fermentation products*
Mills, Cane: bearing pressures. P. P. Seth. (Abs.) 115
carrier drive automatic control. M. R. Galeon and E. T. Dalipe. (Abs.) 210
– hydraulic drive. A. F. Ashdown 339
– stoppage recorder. M. G. Godbole 115

PAGE

Mills: Cane:
disinfectant. J. Casey. (Abs.)..... 210
– C. K. Cloninger and F. T. Corradini 277
– Diversey Ltd. (Pat.) 93
– L. N. Gibe. (Abs.)..... 244
feeders. C. R. Murry and D. S. Shann. (N.B.)..... 151
gears. (Brev.)..... 189
– S. G. Clarke. (Abs.) 52
hydraulic drives. D. J. Wright. (Abs.) 53
Paraguay order. (Brev.)..... 222
pressure feed chute settings. D. S. Shann. (Abs.)..... 53
roller casting. R. Hardy. (Abs.).... 338
– coarse grooving. G. K. Chetty .. 20
– surface hardening. M. R. Scott .. 253
El Salvador order. (Brev.)..... 222
self-setting. M. Beauvisage..... 267
settings. W. Nurse. (Abs.)..... 146
swing-hammer shredder mechanics. W. R. Crawford. (Abs.)..... 53
thrust effect on drive. D. B. Mostert 178
turbine drives. (T.N.) 254
Milling, Cane. D. M. Chaux. (Abs.).. 53
W. R. Crawford 291, 327, 359
S. K. Saraph. (Abs.)..... 308
bagacillo treatment. M. M. Rodriguez. (Abs.)..... 146
combined cane and beet processing. K. H. Parekh and C. J. Mahta.... 116
effect on bagasse pulp yield and quality. V. Guinart. (Abs.) 347
efficiency. G. E. Russell and C. R. Murry. (Abs.) 53
– calculation. U. C. Upadhlaya.... 211
juice bagacillo content. L. D. Diaz L. (Abs.)..... 243
– Brix, pol and purity relationships. J. J. Gómez. (Abs.)..... 183
loss determination. E. C. Vignes and M. Randabel. (Abs.)..... 147
maceration. G. Appel. (Abs.)..... 146
research. M. Shaw. (Abs.) 53
simulation. W. McWhinney and C. R. Murry. (Abs.)..... 53
Molasses: analysis and exhaustion determination. H. J. Reiche *et al.* 215
animal fodder. N. P. Bray. (Pat.).. 59
– – Lesaffre et Cie. (Pat.) 349
citric acid production. Chas. Pfizer & Co. Inc. (Pat.) 349
colorants fractionation by electrophoresis. N. H. Smith. (Abs.).... 346
moisture determination. S. Stachenko. (Abs.) 215
production and trade in US. Anon. 25
protein production..... 304
sea water oil pollution prevention .. 198
surface-active agent. Raffinerie Tirlemontoise S.A. (Pat.) 125
tank residue composition. G. Vavrinecz. (Abs.) 90
treatment with phosphated starch. H. E. Bode. (Pat.) 348
Molasses, Beet: alcohol fermentation antiseptic. T. P. Slyusarenko and E. P. Vitukevich. (Abs.)..... 347
– production chemical control. T. Göçmençelebi. (Abs.)..... 154
animal fodder. (T.N.)..... 222
– – O. Boeger. (Abs.)..... 121
– – S. C. Gupta *et al.* (Abs.)..... 117
– – V. Henry. (Abs.) 121
ash determination. T. D. Carpenter and S. E. Bichsel. (Abs.)..... 345
beet pulp-molasses pellets decomposition in storage. J. D. Jorgensen and R. Gaddie. (Abs.)..... 347
betaine, glutamic acid and nitrogen contents. E. A. Grivtseva *et al.*... 153
– and glutamic acid production.. I. P. Chernikova. (Abs.)..... 185
browning products. E. Steineck.... 314
calcium and magnesium determination. I. Herineanu *et al.* (Abs.).. 251
citric acid fermentation in Turkey 256
colour measurement. I. F. Bugaenko *et al.* (Abs.) 282
electrodialysis. I. M. Litvak *et al.*... 179
exhaustibility determination. D. E. Sinat-Radchenko and V. D. Popov 212
foam prevention. R. Bretschneider *et al.* (Abs.) 86
formation. N. A. Arkhipovich and M. I. Barabanov. (Abs.)..... 153
– T. P. Khvalkovskii. (Abs.)..... 27
glutamic acid fermentation. International Minerals & Chemical Corp. 60
ion exchange treatment. L. Gulminelli. (Abs.) 55
– – – P. Kadlec and J. Buriánek.. 367

INDEX

PAGE

Molasses, Beet: ion exchange treatment. H. Neumann. (Abs.).... 118
– – – F. Perschak. (Abs.)..... 247
– – – Z. P. Zakharov *et al.* (Abs.).. 92
lactic acid determination. J. F. T. Oldfield and M. Shore 3
– – – J. F. T. Oldfield *et al.* 35
lipid content. U. Beiss. (Abs.)..... 313
nitrite determination. C. Reichel.. 28
nitrogen compounds. A. D. Golubeva *et al.* (Abs.) 377
non-sugars contents. P. H. Miller.. 378
optimum Brix for electrodialysis. R. T. Mishchuk *et al.* (Abs.)..... 117
organic acids determination. G. P. Voloshanenko and L. D. Bobrovnik 250
– – – G. P. Voloshanenko *et al.*.. 153
raffinose determination. K. Hangyál and L. Wöller. (Abs.) 377
– and galactinol determination. H. Schiweck and L. Büsching. 120
reverse osmosis. G. Vernols. (Abs.) 118, 372
saturation. D. E. Sinat-Radchenko and V. D. Popov. (Abs.)..... 184
– coefficient, effect of cations and temperature. G. Vavrinecz....90, 119
sucrose crystallization rate. I. F. Bugaenko and L. B. Tuet. (Abs.) 248
sugar content calculation. T. P. Khvalkovskii. (Abs.)..... 372
viscosity and density. A. A. Gerasimenko and Z. B .Shaposhnikova .. 183
yeast fermentation. Y. Akyüz. (Abs.) 154
– – E. Bergander. (Abs.)..... 185
– – P. Birolaud. (Abs.) 154
– – J. Skiba and O. Ilnicka-Olejniczak. (Abs.)..... 347

Molasses, Cane: acetic acid fermentation. M. A. Hussain. (Abs.)..... 121
aconitic acid recovery. M. S. Doulah and M. Badiuzzaman. (Abs.).... 347
alcohol production. A. E. de Erézcano de P. *et al.* (Abs.)..... 379
amino-acids in browning polymers. W. W. Binkley 5
– determination. M. L. Rodriguez.. 377
animal fodder. A. Elias *et al.* (Abs.) 92
– – N. A. Macleod *et al.* (Abs.).... 218
– – J. L. Martin *et al.* (Abs.).....92, 185
– – N. M. Pandit and S. N. Singh .. 347
– – R. Perez. (Abs.) 315
– – R. Perez *et al.* (Abs.)..... 121
– – T. R. Preston and M. B. Willis 284
– – T. R. Preston *et al.* (Abs.) 284
– – J. Resende P. (Abs.) 92
ash determination. R. Singh. (Abs.) 120
by-products. R. A. Cruz. (Abs.) .. 315
colorant separation. N. H. Smith.. 216
colour removal with ion exchange resin. Anon. (Abs.)..... 347
– – – I. M. Abrams. (Abs.)..... 281
composition. O. Valsechi. (Abs.) .. 92
conditioning for pan boiling. M. G. Joshi. (Abs.)..... 309
exhaustion. R. N. Agarwal. (Abs.) 115
– R. G. Camurungan. (Abs.)..... 244
– calculation. J. R. Ariosa M. (Abs.) 211
– – J. J. Balsa and G. R. Serbia.. 183
– – J. Dupont de R. de St. Antoine and E. C. Vignes. (Abs.).... 153
– – R. Singh and N. C. Varma (Abs.) 120
– effect of pan vacuum. R. Singh *et al.* (Abs.)..... 116
– – viscosity. J. C. Chou. (Abs.).. 20
fermentation. J. A. Rosemberg.... 92
– for fats production. (Brev.)..... 198
formation, effect of non-sugars. J. C. González M. (Abs.) 217, 309
fusel oil production. E. David P. .. 284
glutamic acid production. R. Y. Chua. (Abs.) 315
– – – Takeda Yakuhin Kogyo K.K. 349
– – – in Argentina. (Brev.)..... 64
Guyana pump order. (Brev.)..... 222
high-test molasses manufacture in South Africa. A. de Broglio and J. R. Hulett. (Abs.)..... 154
irradiation and fermentation. H. Iizuka *et al.* (Abs.)..... 379
liquid sugar production. H. J. von der Linde and W. Haberich. (Pat.) 317
losses reduction by clarification with phosphoric acid. T. T. Oommen and B. S. Gurumurthy. (Abs.).. 115
meal stickiness reduction. R. Roth 154
pH measurement, effect of dilution. E. C. Vignes. (Abs.) 152
purification. J. J. Balsa. (Abs.).... 146
purity in India. B. Chakravarty and S. Singh. (Abs.)..... 120
sake production. H. Olbrich. (Abs.) 284

PAGE

Molasses, Cane:
spontaneous combustion. D. J. Mehta *et al.* (Abs.)..... 145
– – J. P. Shukla *et al.* (Abs.)..... 215
storage in cane fields in South Africa. Anon. (Abs.)..... 147
sucrose crystallization rate. I. F. Bugaenko and L. B. Tuet. (Abs.) 248
unfermentable reducing matter and polarization. J. P. Shukla and R. M. Maithani. (Abs.)..... 120
volatile carbonyl compounds. J. Hrdlička and G. Janíček. (Abs.).. 251
yeast production. P. Birolaud. (Abs.) 154
– – B. Revuz. (Abs.) 121

Molasses, Refinery: colorant separation by gel filtration. K. Hangyál.... 251
dehydration. T. Miki and T. Shirasaki. (Abs.) 121
exhaustion. F. M. Chapman 7
sucrose crystallization rate. I. F. Bugaenko and L. B. Tuet. (Abs.) 248
yeast production. E. Bergander.... 185

Morocco: flood damage. (Brev.)..... 64, 96
new sugar factory. (Brev.)..... 352
sugar industry. M. R. Bull. (Abs.) 179
– microbiology seminar. (Brev.).. 63
trade agreement with Cuba. (Brev.) 133
Motors *see* Drives
Mozambique *see* Portuguese East Africa

Nicaragua cane diffuser order. (Brev.) 350
Nigeria: Booker McConnell Ltd. report 1969. (N.C.) 258
sugar expansion. (Brev.)..... 159
– factory. (Brev.)..... 169
Nitrogen: amino-N determination in beet. N. Kubadinow and L. Wieninger. (Abs.)..... 313
– – – L. Wieninger. (Abs.)..... 313
– – in refined and white sugar. S. Hase *et al.* (Abs.) 346
availability in soil, effect of cane root C:N ratio. R. A. Wood. (Abs.) 49
in beet juice, effect of phosphatation. W. Braunsteiner. (Abs.)..... 310
– – – on purification. A. D. Golubeva *et al.* (Abs.)..... 377
– molasses. E. A. Grivtseva *et al.*.. 153
– virus yellows. R. T. Lewellen *et al.* 337
– yield. E. C. Varsa. (Abs.)..... 113
cane leaf content and yield. T. R. Srinivasan and A. Mariakulandai 366
compounds and beet juice and molasses purities. A. D. Golubeva *et al.* 377
– effect on clarification. S. N. G. Rao *et al.* (Abs.) 116
determination in beet. C. W. Maag 251
effect on cane molasses formation. J. González M. (Abs.)..... 309
melanoidin formation. V. Prey.... 119
nitrate determination in beet petioles. R. D. Miller. (Abs.)..... 378
– effect on cane enzymes. A. G. Alexander. (Abs.) 45
and *Nunicia viridis* fecundity. R. H. G. Harris. (Abs.) 49
peptide determination in beet juice. V. Prey and G. Petershofer. (Abs.) 152
see also Amino-acids; Betaine; Fertilizers *and* Glutamic acid
Norway sugar imports 1969. (Brev.) .. 224

Obituary: J. Eisner 190
Sir Peter Runge..... 320
T. Theis 223
Oil *see* Lubrication

Packaging: accidents. R. Kröcher .. 280
machinery design hazards. R. Kröcher. (Abs.)..... 372
refined sugar. Anon. (Abs.)..... 24
sugar in USSR. I. S. Chupak and L. A. Rozental'. (Abs.)..... 87
white sugar. V. S. Gryuner *et al.*.. 343
Pakistan: bagasse board manufacture. R. Hesch and H. Frers. (Abs.) .121, 218
cane ratooning tests. M. I. Khan *et al.* (Abs.)..... 142
– research station. (Brev.)..... 288
– seed setting for breeding. S. D. Fasihi and S. Ahmad. (Abs.).. 141
– varieties. H. Ahmad and N. D. Yusuf. (Abs.)..... 275

PAGE

Pakistan:
sugar expansion finance. (Brev.).. 224
– export plan. (Brev.) 351
– factories. (Brev.).....158, 255, 288, 382
– – refinery order for UK. (Brev.) 126
Pans, Vacuum. P. Devillers and C. Cornet. (Abs.) 373
Fletcher and Stewart Ltd. (Pat.).. 380
A. R. Grandadam. (Abs.)..... 279
J. W. Hill. (Abs.)..... 21
E. McDougall. (Abs.)..... 21
B. B. Paul. (Abs.) 177, 308
P. H. Petri. (Abs.)..... 375
continuous. (T.N.).....221, 286
– K. Jánosfy. (Abs.)..... 374
– G. W. Luce 131, 170
– Fives Lille-Cail. F. Dambrine *et al.* 181
– – – A. Dolinek. (Abs.)..... 118
dimensions calculation. Y. D. Kot and L. P. Polozenko. (Abs.).... 55
forced circulation. J. Blaude. (Abs.) 87
horizontal, vacuum and vapour flow. J. de Cremoux. (Abs.)..... 245
hydrodynamics. V. P. Troino. (Abs.) 180
massecuite constant level. A. R. Grandadam. (Abs.)..... 341
– sampler. N. C. Varma *et al.* (Abs.) 145
perforated steam coils. E. H. Phipson. (Abs.) 85
scale prevention. H. E. Halden *et al.* 246
– reduction with sequestering agents. J. A. Casey. (Abs.)..... 85
stainless steel *vs.* copper tubes. J. A. Cotner. (Abs.)..... 146
stirrer hydraulic drive. A. F. Ashdown. (Abs.) 339
tube scale removal. (T.N.)..... 222
see also Boiling; Crystallization; Entrainment; Heat *and* Massecuite
Paper, Bagasse: bagasse biological pretreatment. T. Macdonald. (Abs.) 91
manufacture. W. J. Nolan. (Abs.).. 29
– in Colombia. (Brev.) 351, 384
– – Anon. (Abs.) 379
– effect of cane preparation. V. Guinart. (Abs.)..... 347
– Mexico. (Brev.)..... 203
– – Anon. (Abs.) 284
– Spain. Anon. (Abs.)..... 284
– Thailand. (Brev.)..... 189
tear strength. E. J. Villavicencio.. 379
see also By-products *and* Pulp, Bagasse
Paraguay cane mill order. (Brev.).. 222
– sugar factory modernization order.. 254
Payment, Beet: in Hungary. L. Nagy 279
– – UK beet price 1971. (N.C.)..... 322
Payment, Cane: computer system in Philippines. C. O. Ortaliz. (Abs.) 210
– – South Africa. J. C. Williams and T. R. Loudon. (Abs.).. 206
Pectin: cane diffusion. A/S De Danske Sukkerfabrikker. (Abs.) 244
Pectin, Beet: enzymatic hydrolysis. R. Bretschneider and J. Copíková 215
sugars solutions CO_2 hydration. J. Vašátko *et al.* (Abs.)..... 283
Peru: sugar production 1968/69. (Brev.) 95
– synthetic rubber study. (Brev.).. 96
Pests, Beet: aphid infestation, effect of beet spacing and planting time. G. D. Heathcote. (Abs.)..... 369
– – and virus yellows spread. W. Steudel and R. Thielemann.. 50
– insecticide. (T.N.)..... 126
– varietal resistance. R. L. Wallis and J. E. Turner. (Abs.)..... 18
Atomaria linearis control. L. Bonnemaison *et al.* (Abs).....50
beet damage in Belgium. Anon... 337
– protection against aphids. D. G. Heathcote. (Abs.)..... 19
chemical control. A. G. Gallarate 337
insect control in France. Anon... 209
insecticide-herbicide application and beet. H. Orth and G. Maas. (Abs.) 143
– residues in beet. L. van Steyvoort *et al.* (Abs.)..... 337
leafhopper and curly top virus control. N. R. Malm and R. E. Finkner. (Abs.)..... 176
– as curly top virus vector. O. A. Hills and R. W. Brubaker .. 176
nematodes. G. D. Beierle. (Abs.).. 82
– control. E. C. Jorgenson. (Abs.) 242
– – and beet yields. E. C. Jorgenson 242
organo-tin pesticide analysis. P. Cenci and B. Cremonini. (Abs.).. 377
soil fumigation for nematode control and beet planting. R. C. Johnson 337

INDEX

PAGE

Pests, Beet:
in UK. F. G. W. Jones and R. A. Dunning. (N.B.) 151
wireworm sex attractant. M. Jacobson *et al.* (Abs.) 19
Pests, Cane: in Africa. H. Barat. (Abs.) 17
army worm control. B. E. Hitchcock 336
– – – in Philippines. Anon. (Abs.) 15
black beetle control. C. L. Toohey 47
borer. A. Macqueen. (Abs.) 47
– attack, effect of cane characteristics. P. N. Avasthy *et al.*.. 13
– – – planting and fertilization. M. M. I. Khan and C. K. Muhammad. (Abs.) 274
– – – spacing. S. Hatmosoewarno 174
– – in Louisiana. L. J. Charpentier *et al.* (Abs.) 17
– in Australia. A. Macqueen. (Abs.) 142
– control. V. P. Rao. (Abs.) 48, 111
– – in Barbados. (Brev.) 256
– – Cuba. L. C. Scaramuzza. (Abs.) 140
– – Louisiana. S. D. Hensley. (Abs.) 368
– – Réunion. Anon. (Abs.) 140
– egg parasite, effect of herbicides. S. R. Cornejo. (Abs.) 273
– flight activity in Puerto Rico. F. W. Fisk and R. P. Pérez.. 45
– host plants. S. Hatmosoewarno.. 335
– parasite in India. A. N. Kalra *et al.* (Abs.) 175
– strains in Louisiana and Puerto Rico. S. D. Hensley and L. F. Martorell. (Abs.) 17
in Ceylon. Z. A. Siddiqui. (Abs.).. 46
control in Australia. S. Greenaway 47
– Louisiana. Anon. (Abs.) 110
earth pearls. G. Wilson. (Abs.) 16
– – control in Rhodesia. Anon... 80
frenchi grub head widths. G. Wilson 47
froghopper control in Brazil. P. Guagliumi. (Abs.) 141, 367
– and fly control 271
– fungus parasite. M. Abarca R. and H. Rodríguez. (Abs.) 335
grasshopper control in Philippines. Anon. (Abs.) 15
grub control. Anon. (Abs.) 305
– – K. M. Gupta *et al.* (Abs.).... 46
– – B. A. Hitchcock. (Abs.) 142
– in Queensland. R. M. Bull. (Abs.) ..366
insecticide. (T.N.) 62
leafhopper as cause of leaf galls. F. M. L. Sheffield. (Abs.) 274
– damage in India. S. C. Gupta and A. P. Gupta. (Abs.) 175
– sterilization for Fiji disease control. A. W. Osborn. (Abs.) 81
leaf-miner control in India. V. G. Rajami *et al.* (Abs.) 14
locusts in South Africa. J. A. Whellan. (Abs.) 79
in Mexico. S. Flores C. (Abs.).... 111
nematodes. M. A. Costilla. (Abs.).. 306
– control. J. David-Recuenco. (Abs.) 240
– – in Louisiana. W. Birchfield.. 175
– – trials in Florida. J. A. Winchester. (Abs.) 81
New Guinea weevil in Hawaii. W. C. Mitchell *et al.* (Abs.) 110
Numicia viridis fecundity, effect of nitrogen. R. H. G. Harris. (Abs.) 49
Parasa bicolor in India. H. Singh and S. P. Sharma. (Abs.) 206
pink mealy bug in India. J. M. Satpathy and R. K. Das. (Abs.) 46
– – – Mozambique. M. L. Goncalves 80
pyrilla control. R. N. Agarwal. (Abs.) 240
rat control. Anon. (Abs.) 204, 275
– – in Australia. R. Barringham.. 47
– damage estimation. G. A. Hood 110
– – in Hawaii. Anon. (Abs.) 17
– tracking in Hawaii. Anon. (Abs.) 204
rodent-flea correlations. G. E. Haas 110
soil fumigation effect on cane. S. P. Jaiswal and A. K. Rishi. (Abs.) 79
soldier fly control. Anon. (Abs.).. 175
– – – B. E. Hitchcock. (Abs.).... 336
– – – R. B. Moller. (Abs.) 16
stem maggot. M. Shibuya and A. Tanaka. (Abs.) 45
wild pigs in Australia. C. M. McAleese 16
pH: automatic control in carbonatation. S. Zagrodzki and J. Dobrzycki.. 371
– measurement. A. J. Ancona *et al.* 215
beet juice buffering matter. F. Neubrunn. (Abs.) 152
– – and colour. N. Kubadinow .. 313
– – control by cation exchange. J. F. T. Oldfield *et al.* 323, 355

PAGE

pH: beet juice in evaporation. V. A. Pronina and S. Z. Ivanov. (Abs.) 341
– – temperature relationship. V. A. Maksyutov and V. A. Kolesnikov. (Abs.) 282
cane diffusion. A/S De Danske Sukkerfabrikker. (Abs.) 244
– juice change on heating. V. Potrojov and S. Morales. (Abs.).. 376
– – liming. T. K. Mukerjee. (Abs.) 115
– – – E. C. Vignes. (Abs.) 147
carbonatation juice heating. B. B. Paul and I. S. Saxena. (Abs.).... 115
invert sugar decomposition. V. A. Kolesnikov *et al.* (Abs.) 28
measurement of syrup and molasses, effect of dilution. E. C. Vignes.. 152
and pOH temperature dependence. V. A. Pronina and S. Z. Ivanov.. 282
refined and white sugar. S. Hase *et al.* 346
soil and cane sugar yields in Puerto Rico. A. Rodriguez G. and F. Miranda. (Abs.) 174
– liming and beet yield. G. Schmid 83
sucrose decomposition rate. A. R. Sapronov and S. E. Kharin. (Abs.) 90
– – – buffering effects. S. Z. Ivanov *et al.* (Abs.) 377
– – – Z. A. Mil'kova *et al.* (Abs.).. 28
sugar solution temperature effect. A. R. Sapronov and T. S. Zvereva 282
– – thermal stability. L. I. Trebin *et al.* (Abs.) 183
syrup ion exchange treatment. S. Z. Ivanov and G. A. Chikin. (Abs.) 150
temperature relationship. V. A. Maksyutov and V. A. Kolesnikov .. 282
Philippines: army worm control. Anon. 15
bagasse board. M. F. Gloria. (Abs.) 315
bulk handling. L. Ymson. (Abs.).. 211
cane agriculture technical assistance programme. D. K. Ballinger... 240
– breeding. J. N. Gibe and F. Y. Panol. (Abs.) 240
– diffuser order. (Brev.) 222
– payment. C. O. Ortaliz. (Abs.).. 210
– transport. Anon. (Abs.) 15
– varieties. F. T. Aala. (Abs.).. 109, 239
– – J. N. Gibe and F. I. Ledesma 240
– – trials. N. S. Divinagracia *et al.* 239
– – – A. M. Galvez *et al.* (Abs.).. 240
– – – E. P. Lapastora *et al.* (Abs.) 208
drought. C. M. Madrazo. (Abs.).... 210
fruit growing on cane lands. Anon. 173
glutamic acid production. R. Y. Chua. (Abs.) 315
grasshopper control. Anon. (Abs.) 15
industrial engineering at Victorias. J. P. Sto. Domingo. (Abs.).... 210
new sugar factories. (Brev.).. 64, 158, 159
ploughing and cane yields. F. E. Mercado. (Abs.) 240
raw sugar quality. T. R. Ancheta. 250
– – – C. M. Madrazo. (Abs.) 217
– – sampling. Anon. (Abs.) 250
refined sugar transport. R. N. Navarro. (Abs.) 248
sacadas. E. L. Claparols. (Abs)... 17
– Z. V. de la Cruz. (Abs.) 15
– V. L. Mercado. (Abs.) 336
soil drainage. F. Y. Panol. (Abs.)..240, 335
– erosion. F. Y. Panol. (Abs.).... 81
sugar factory equipment manufacture. J. J. Baum. (Abs.) 210
– – – A. M. Hain. (Abs.) 210
– – expansion. (Brev.) 32
– – re-erection. (Brev.) 192
– production 1968/69. (Brev.).... 96
– – 1969/70. (Brev.) 384
typhoons. P. Esleyer. (Abs.) 109
weeds. Anon. (Abs.) 204, 306
Phosphatation. W. Braunsteiner... 310
Piping: installation and maintenance. B. S. Zhalov. (Abs.) 179
– *see also* Tubes
Poland: beet breeding research. M. Jassem. (Abs.) 82
– pliers. J. Strzerzysz. (Abs.)..... 340
– storage. M. Milosz. (Abs.)..... 245
– – W. Trzciński and J. Malec. (Abs.) 245
new sugar factory. (Brev.)..... 64
sugar exports 1969. (Brev.) 256
– factory exports. (Brev.)..... 384
– industry relocations. (Brev.).... 128
– micro-organisms. I. Januszewicz and K. Mossakowska. (Abs.).. 280
– production reduction. (Brev.).... 160
Polarization: automatic polarimeter.. 318
beet juice optical activity determination. A. Y. Zagorul'ko and A. A. Ponomarenko. (Abs.) 153

PAGE

Polarization.
cane molasses unfermentable reducing matter. J. P. Shukla and R. M. Maithani. (Abs.) 120
effect of halides. G. Vavrinecz .. 282, 346
saccharimeter quartz plate rotation dispersion. R. Bünnagel and F. Spiegelhalter. (Abs.) 345
sucrose determination with borax. J. Fernández B. and J. Marinello M. 89
Polarography: lead and copper determination in white sugar. W. Mauch *et al.* (Abs.) 251
Polysaccharides: enzymatic hydrolysis. R. Bretschneider and J. Čopíková -forming micro-organisms. F. Schneider *et al.* (Abs.) 215
and molasses formation. J. C. González M. (Abs.) 216
see also Dextran *and* Starch 309
Portugal: arrado sugar manufacture. J. Cunha da Silveira. (Abs.).... 150
– sugar industry modernization. (Brev.) 191
Portuguese East Africa: cane leaf scald. C. Ricaud. (Abs.) 81
– washing at Luabo. T. Covas .. 84
mealybug. M. L. Goncalves. (Abs.) 80
sugar production 1968. (Brev.).... 32
– – 1969. (Brev.) 384
Portuguese West Africa new sugar factory. (Brev.) 159
Power: consumption in electrodialysis. R. T. Mishchuk *et al.* (Abs.).... 117
production in sugar factory. H. Huber. (Abs.) 340
– – – H. Huber and W. Stolz. (Abs.) 22
– – – L. Paxton. (Abs.) 146
Prices: Jamaica raw sugar under the Commonwealth Sugar Agreement. 384
UK refined sugar. (N.C.) 66
world raw sugar. (N.C.) 130
– sugar prospects. (N.C.) 33
– and US raw sugar. (N.B.) 56, 182
see also Payment
Puerto Rico: calcium silicate fertilizer trials. E. Reyes S. and A. Velez R. 174
cane borer. S. D. Hensley and L. F. Martorell. (Abs.) 17
– – flight activity. F. W. Fisk and R. P. Pérez. (Abs.) 45
– bulk handling. C. V. Rodríguez 208
– field labour. R. Caleiro *et al.* (Abs.) 17
– harvesting difficulties. (Brev.).. 32
mechanical harvesting. F. Carreras 208
– – F. Delgado F. (Abs.) 208
– – F. Delgado F. *et al.* (Abs.).... 335
– – T. Ruíz M. (Abs.) 208
– – J. Sánchez D. (Abs.) 208
– – H. A. Willett. (Abs.) 207
– – J. Zabata C. (Abs.) 208
overhead irrigation. E. S. Williams 174, 239
raw sugar quality. C. A. Martínez.. 244
soil and cane and sugar yields. A. Rodríguez G. and F. Miranda.. 174
– drainage in cane lands. T. C. Lyons 208
sugar factory closure. (Brev.)..... 256
– industry difficulties. (N.C.)..... 162
– production 1969. (Brev.) 95
Pulp, Bagasse: digester. (Brev.)..... 30
manufacture. A. J. A. Asplund.. 252
– M. A. Islam. (Abs.) 154, 284
– E. Ramos. (Abs.) 218
– R. B. Reinhall. (Pat.) 253
– proposal for Hawaii. (Brev.)..... 384
yield and quality, effect of cane milling. V. Guinart. (Abs.)..... 347
see also By-products *and* Paper, Bagasse
Pulp, Beet: aflatoxin determination. J. I. Teng and P. C. Hanzas. (Abs.) 345
animal fodder. Beloit Corp. (Pat.) 220
– – O. Boeger. (Abs.) 121
– – S. C. Gupta *et al.* (Abs.)..... 117
– – V. Henry. (Abs.) 121
– – L. M. Koelsch. (Pat.)..... 187
"Disyston" determination. J. I. Teng and P. C. Hanzas. (Abs.).. 378
dryer. Büttner Werke AG. (Pat.).. 60
– J. Lehóczki. (Abs.) 54
– BMA order. (Brev.)..... 94
– Salzgitter order. (Brev.)..... 318
drying time calculation. M. G. Parfenopulo. (Abs.) 185
heating rate in storage. W. O. Bernhardt and R. A. McGinnis. (Abs.) 118
molassed pellet decomposition in storage. J. D. Jorgensen and R. Gaddie. (Abs.) 347
pneumatic conveying. I. Harsányi and R. Kubovics. (Abs.)..... 87
press. H. M. Bauserman. (Pat.).... 317

INDEX

PAGE

Pu'p, beet;
press. E. V. Jung. (Pat.) 253
– P. Solberg. (Pat.)..... 188
protein production 304
Pumps. (T.N.) 94, 350
cane molasses, Guyana order. (Brev.) 222
centrifugal. (T.N.)..... 254
filter cake. I. Pável. (Abs.)..... 54
new UK company. (Brev.)..... 30

Radio-isotopes application in the sugar industry. J. K. Basson. (Abs.).. 90
Raffinose: determination. H. Schiweck and L. Büsching. (Abs.)..... 120
– in beet molasses. K. Hangyál and L. Wöller. (Abs.)..... 377
– sucrose solutions. G. Saglietto and G. Mantovani. (Abs.)..... 345
ester production. Cassella Farbwerke Mainkur AG. (Pat.)..... 380
Raw sugar: bulk shipment. Tsentralnoe Proektna-Konstruktorskoe Bjuro 219
– storage in US. A. Acosta. (Abs.) 211
caking. A. P. Gupta and M. Narain 278
colorant properties and isolation in refining. K. J. Parker and J. C. Williams. (Abs.)..... 216
– separation. L. Farber *et al.* (Abs.) 216, 376
colour measurement. I. F. Bugaenko *et al.* (Abs.)..... 282
– removal laboratory tests. I. M. Abrams. (Abs.)..... 281
drying. A. K. Rapson. (Abs.).... 52
dust explosion variables. R. E. Edwards. (Abs.)..... 181
filtrability determination. K. Amako and O. Kimura. (Abs.)..... 376
Jamaica price reduction under the Commonwealth Sugar Agreement 384
quality. J. C. P. Chen. (Abs.).... 178
– determination. M. Friml. (Abs.) 217
– in Philippines. T. R. Ancheta.. 250
– – C. M. Madrazo. (Abs.)..... 217
– Puerto Rico. C. A. Martinez. (Abs.) 244
– standards. E. J. Culp. (Abs.).. 216
sampling and testing. Anon. (Abs.) 250
shipping investigation. (Brev.).... 64
solution treatment. F. G. Lippe and F. Suppan. (Pat.) 316
starch determination. D. F. Charles 216
– removal with enzyme. (T.N.).... 285
US trade data. Anon. (N.B.)..... 25
warehouse. Anon. (Abs.)..... 281
world price. (N.C.)..... 130
– and US prices. (N.B.).....56, 182
see also Affination; Boiling; Bulk handling; Bulk storage; Bulk transport; Colour; Control, Chemical; Crystallization; Dryers; Factory; Massecuite; Polarization; Refining *and* Sugar
Reducing sugars: determination. B. Kopřiva. (Abs.)..... 119
in refined and white sugar. S. Hase *et al.* (Abs.) 346
see also Dextrose; Invert sugar; Levulose *and* Sugars
Refined sugar: absorbency. K. W. R. Schoenrock. (Abs.) 345
analysis. S. Hase *et al.* (Abs.).... 346
bulk silo in UK. E. C. Tubb. (Abs.) 150
caking. D. F. Bagster.....263, 298
colour determination. M. Muro *et al.* 377
– – A. Y. Zagorul'ko and L. A. Korobeinikova. (Abs.) 119, 377
dust explosion variables. R. E. Edwards. (Abs.)..... 181
micro-organisms. L. Vokounová.. 215
moisture determination. H. Mašková 119
packaging. Anon. (Abs.)..... 24
solution crystallization rate determination. A. V. Zubchenko and V. P. Cherpakov. (Abs.)..... 313
syrup ion exchange treatment effect. T. A. Klochkova and T. A. Balashova. (Abs.) 24
trace elements. A. A. Gerasimenko *et al.* (Abs.) 282
transport in Philippines. R. N. Navarro. (Abs.)..... 248
UK prices. (N.C.)..... 66
warehouse in Texas. Anon. (Abs.) 88
weighing. (T.N.)..... 61
see also Cube sugar; Icing sugar; Liquid sugar; Tablet sugar *and* White sugar

PAGE

Refinery: analytical methods. R. W. Plews. (N.B.)..... 249
automatic boiling control. (T.N.).. 221
"Autofilter" operation. R. Velázquez R. (Abs.)..... 343
boiling. F. M. Chapman..... 76, 103
– L. Ruciński and T. Drozdowski.. 343
– and liquor purity. S. A. Brenman *et al.* (Abs.) 88
bone char revivification kiln. Y. Oyama. (Abs.)..... 342
closure in France. (Brev.)..... 272
continuous vacuum pan. F. Dambrine *et al.* (Abs.)..... 181
dust explosion hazard. R. E. Edwards and E. W. P. Cunneen.. 150
ergonomics. R. Veroeveren. (Abs.) 23
evaporator automatic level and Brix control. R. de la Torre. (Abs.).. 150
– falling-film. G. S. Fairhurst and A. Mayiott. (Abs.)..... 248
expansion in Zambia. (Brev.)..... 320
filter cake sweetening-off. R. Y. Jehu and S. Stachenko. (Abs.).. 181
in Finland. G. Hernberg. (Abs.).. 88
glucose process plant order. (Brev.) 350
in Japan. T. Yamane. (Abs.)..... 88
jet eductor applications. D. Sulițeanu. (Abs.) 375
liquor Brix control. E. R. Allen.. 122
– carbon removal by trap filters. R. Velázquez R. (Abs.)..... 343
– colour analysis..... 303
– filtration. J. H. Duff. (Pat.)..... 122
– – S. B. Pollack *et al.* (Abs.).... 343
massecuite crystallization. S. A. Brenman *et al.* (Abs.).....181, 311
– – I. F. Bugaenko and L. B. Tuet 248
micro-organisms. R. D. Skole *et al.* 184
natural gas for fuel in UK. (Brev.) 350
Pakistan order for UK. (Brev.)..... 126
pollution reduction in US. (Brev.) 32
products colorant separation. L. Farber *et al.* (Abs.).....216, 376
– pH and invert sugar measurement. A. J. Ancona *et al.* (Abs.)..... 215
raw sugar warehouse. Anon. (Abs.) 281
reinforced plastic application. N. Rosenberg. (Abs.)..... 24, 88
reorganization in Portugal. (Brev.) 191
sugar and bone char dust control. B. A. Stephens. (Abs.)..... 248
– recovery and molasses exhaustion. F. M. Chapman..... 7
in Sweden. S. Zagrodzki and H. Zaorska. (Abs.) 118
Trinidad. (Brev.) 32
US. (Brev.)..... 64
– J. W. Alberino. (Abs.)..... 88
waste water treatment. G. S. Baumert. (Abs.)..... 375
wedge wire screens. H. M. Wallenstein and H. Norsen. (Abs.).... 343
Refining: I. N. Kaganov. (N.B.).... 26
R. Velázquez R. (Abs.)..... 343
active carbon porosity and decolorizing efficiency. J. T. Truemper 216
affination syrup clarification with polyphosphates. S. Iwashina and M. Abe. (Abs.)..... 24
– – – S. Iwashina *et al.* (Abs.).... 24
ash removal by ion exchange. P. Kadlec and J. Buriánek. (Abs.).. 373
bone char and active carbon. V. Valter. (N.B.)..... 344
clarification with plant extract. F. G. Lippe and F. Suppan. (Pat.).... 316
colorant formation, properties and isolation. K. J. Parker and J. C. Williams. (Abs.)..... 216
colour removal with granular carbon. Y. O. Kravets *et al.* (Abs.)..... 88
– – – G. F. Spink. (Abs.)..... 375
– – – F. M. Williams. (Abs.).... 181
– – – *vs.* bone char. A. M. Moult 375
– – – and ion exchange. N. A. Arkhipovich and B. A. Kutsenko. (Abs.) 88
– – by ion exchange 303
– – – I. M. Abrams. (Abs.)..... 281
– – – D. F. Bagster..... 200
– – – K. Čiž. (Abs.)..... 343
– – – T. Ionescu and F. Domsa..181, 343
– – – Y. Ito *et al.* (Abs.) 24
– – – R. Kunin. (Abs.)..... 177
– – – R. Kunin and F. Pollio. (Abs.) 181
– – – N. K. Kvacheva. (Abs.).... 342
– – – A. Miyahara. (Abs.)..... 248
– – – and refined sugar purity. T. A. Klochkova and T. A. Balashova. (Abs.)..... 24

PAGE

Refining:
colour removal by ion exchange resin-active carbon-adsorbent mixtures. B. N. Dickinson and H. E. Barrett. (Abs.) 281
– – – damage by syrup decolorization. G. A. Chikin *et al.*.. 217
– – – working cycle calculation. G. A. Chikin and G. N. Tyuleneva. (Abs.)..... 248
– – – and syrup pH. S. Z. Ivanov and G. A. Chikin. (Abs.).. 150
– – with surface-active agent..... 304
carbonatation. K. I. Michev *et al.*.. 88
– K. Muraoka *et al.* (Abs.)..... 342
– with chloride-of-lime. J. Bureš and M. Friml. (Abs.)..... 281
clarification. R. Velázquez R. (Abs.) 343
– with phosphated starch. H. E. Bode. (Pat.) 348
optimum process factor determination. J. Buriánek. (Abs.)..... 88
press filtration. S. B. Pollack *et al.* 343
recrystallization from alcohol. B. Smythe and R. Staker. (Pat.).. 187
research. K. J. Parker and A. J. Vlitos. (Abs.)..... 152
– Technical Session 1970..... 383
in Sweden. A. Laudon. (N.B.)..... 249
white sugar. K. Hangyál. (Abs.)..251, 375
see also Affination; Bone char; Carbon; Ion exchange *and* Raw sugar
Refractometer. (T.N.)..... 221
Renold Ltd. (T.N.) 30
Réunion: bagasse board manufacture. R. Hesch. (Abs.)..... 121
– cellulose plant. (Brev.) 63
cane breeding. Anon. (Abs.)..... 142
– diseases, pests and fertilizers. Anon. (Abs.) 140
Rhodesia: cane mosaic. Anon. (Abs.) 80
– smut. G. L. James. (Abs.)..... 49
earth pearl control. Anon. (Abs.) 80
irrigation. Anon. (Abs.)..... 13
– K. C. Leverington. (Abs.)..... 241
locust damage. J. A. Whellan. (Abs.) 79
Rum analysis..... 303
Rumania sugar production 1969. (Brev.) 160

Salvador cane mill order. Brev.) 222
Saponin composition and determination. D. Steganović *et al.* (Abs.) 27
– determination in beet white sugar. P. C. Hanzas and W. W. Barr.. 378
Scale: composition. G. Vavrinecz.. 90
reduction in evaporators. J. A. Casey 85, 348
– – Fabcon Inc. (Pat.)..... 380
– – A. S. Gal'perin. (Abs.)..... 86
– – R. Maloney. (Abs.).....20, 277, 338
– – by clarification with MgO. (T.N.) 30
– – silicone application to tubes. M. Wiekluk. (Abs.)..... 54
– vacuum pans. H. E. Halden *et al.* 246
removal. (T.N.)..... 222
– J. W. Callahan. (Pat.)..... 186
– S. K. Chattopadhyay. (Abs.).... 115
– from boilers. K. K. Menon. (Abs.) 308
– evaporators. O. Argudín. (Abs.) 339
– – M. Mohan *et al.* (Abs.)..... 145
– – L. P. Sofronyuk. (Abs.)..... 371
Screen: beet pulp press water. M. Sterzinger. (Abs.) 118
– refinery liquor. H. M. Wallenstein and H. Norsen. (Abs.) 343
Senegal sugar project. (Brev.)..... 352
Sierra Leone sugar imports 1969 .. 272
Singapore sugar imports 1969. (Brev.) 160
Soil: beet growing trials. E. von Boguslawski and R. Schildbach. (Abs.) 51
cane land grading. Anon. (Abs.).. 305
– – – C. H. Burleigh. (Abs.).... 15
– – preparation. D. S. Boyce. (Abs.) 239
– smut spore viability. G. L. James 241
– and sugar yields in Puerto Rico. A. Rodríguez G. and F. Miranda 174
compaction and ploughing in the Philippines. F. E. Mercado. (Abs.) 240
conditioner. G. A. Anderson. (Pat.) 157
– and beet yield. E. F. Bolton and J. W. Aylesworth. (Abs.).... 18
– from sugar factory mud. Anon. 367
– – – P. Bogdanova *et al.* (Abs.).. 315
contouring. J. N. S. Hill. (Abs.) 368
in Costa Rica. M. A. Gonzalez and S. A. Gavande. (Abs.)..... 305
determination in cane. A. L. Jones 89
drainage. Anon. (Abs.)..... 175
– C. L. Toohey. (Abs.) 16

INDEX

PAGE

Soil: drainage. E. S. Williams. (Abs.) 239
– in cane fields. Anon. (Abs.) 48
– in Philippines. F. Y. Panol. (Abs.) 240, 335
– planning. E. D. Coles. (Abs.) 49
– in Puerto Rico. T. C. Lyons (Abs.) 208
– US and Bahamas. F. Delgado 239
erosion control in cane fields. F. Y. Panol. (Abs.) 81
in India. K. V. Joshi. (Abs.) 206
liming and beet yield. G. Schmid 83
micro-organisms in Jamaica. B. M. Robison. (Abs.) 366
moisture, effect of nitrogen and cane growth. T. R. Srinivasan and A. Mariakulandai (Abs) 206
– requirements for beet in Czechoslovakia. M. Veneni. (Abs.) 51
mulching and beet seed emergence and growth. A. von Müller and C. Winner. (Abs.) 19
– for cane sett growth. H. C. Fu *et al.* (Abs.) 204
nitrate nitrogen determination. R. D. Miller. (Abs.) 378
nitrogen absorption. D. T. Takahashi. (Abs.) 206
– availability, effect of cane root C:N ratio. R. A. Wood. (Abs.) 49
organo-tin pesticides analysis. P. Cenci and B. Cremonini. (Abs.) 377
salinity in Taiwan. L. S. Kuo. (Abs.) 366
subsoiling effects on cane. J. Glover 48
– – – P. K. Moberly. (Abs.) 241
– – – in Hawaii. A. C. Trouse and R. P. Humbert. (Abs.) 275
type and beet yield. A. K. Swenerton 113
water-logging and salinity and cane varietal performances. S. Fasihi and H. Ahmad. (Abs.) 273
see also Fertilizers; Irrigation *and* Pests
Solubility, Sucrose. A. Smelík *et al.* 378
– – effect of non-sugars. N. P. Silina 183
Sorghum: starch removal from juice. B. A. Smith. (Pat.) 124, 188
sucrose content increasing. E. I. Du Pont de Nemours & Co. (Pat.) 219
syrup analysis. A. R. Johnson and A. T. Sturdivant. (Abs.) 27
weed in Australia. J. F. Usher. (Abs.) 142
South Africa: cane agriculture. K. Dymond. (Abs.) 49
– – J. L. du Toit and M. G. Murdoch 48
– damage by locusts. J. A. Whellan 79
– delivery system organization. J. C. Williams and T. R. Loudon 206
– diffusion. (Brev.) 320
– irrigation trials. G. D. Thompson and J. P. Boyce. (Abs.) 49
– labour utilization. D. K. Morrow 173
– leaf scald. Anon. (Abs.) 17
– – – control. G. M. Thomson 274
– mechanical harvesting. G. S. Bartlett. (Abs.) 173
– mechanization demonstration. Anon. (Abs.) 306
– spacing trials. J. P. Boyce. (Abs.) 48
– sucrose determination and delivery calculation. J. C. Williams and T. R. Loudon. (Abs.) 178
– varietal stem epidermis differences. G. Roth. (Abs.) 48
Durban bulk terminal conveyor system. A. M. Guthrie and J. R. Pilcher. (Abs.) 84
filter cloth plant. (Brev.) 350
high-test molasses manufacture. A. de Broglio and J. R. Hulett. (Abs.) 154
molasses storage in cane fields. Anon. 147
soil contouring. J. N. S. Hill. (Abs.) 368
sugar exports 1969. (Brev.) 96
– industry metrication. (Brev.) 96
– production 1969/70. (Brev.) 320
Tongaat Sugar Co. Ltd. 1970 report 354
vacuum clarification at Darnall. R. D. Archibald. (Abs.) 84
Spain: bagasse paper manufacture. Anon. (Abs.) 284
sugar imports 1969. (Brev.) 159
– industry reorganization. (Brev.) 172
Starch: determination in raw sugar. D. F. Charles. (Abs.) 216
effect on cane juice flotation. P. A. Prince. (Abs.) 84
– clarification. S. N. G. Rao *et al.* 116
hydrolysis in cane juice. J. Bruijn and R. P. Jennings. (Abs.) 84
inclusion in sugar crystal. T. Ando *et al.* (Abs.) 376
– – – R. P. Jennings. (Abs.) 90

PAGE

Starch; removal with enzyme. (T.N.) 285
– from sorghum juice. B. A. Smith 124, 188
Statistics: Brazil sugar data 223
Canada sugar imports 192
Cuban sugar data 224
Czechoslovakia sugar exports 352
Europe beet area 1970 226
– sugar production 1969/70 2
– – – 1970/71 321, 384
Finland sugar imports and exporrs 159
French sugar imports and exports 160
Hong Kong sugar 351
Japan sugar imports 288
Malaysia sugar imports 256
Switzerland sugar imports 192
UK sugar imports and exports 127
US sugar imports 255
– – supply quota 1970 63, 226, 322
world sugar balance 1968/69 34
– – – 1969/70 65, 163, 290
– – consumption per caput 64
– – production estimate 1969/70 31, 319
Steam: consumption fluctuation. P. Freund. (Abs.) 340
– reduction. S. Vermes. (Abs.) 374
evaporator requirement calculation. P. Freund. (Abs.) 374
expansion heat losses. V. Sázavsky 86
turbine cane mill drives. (T.N.) 254
– maintenance. J. R. Siekert. (Abs.) 85
see also Boilers; Heat *and* Power
Storage: automatic atmospheric moisture control. Anon. (Abs.) 211
bagasse. J. H. Payne. (Abs.) 177, 309
– V. T. Xuan and R. Samaniego 315
– pre-treatment for paper making. T. Macdonald. (Abs.) 91
bagged sugar hardening. C. Milián S. 217
beet pulp heating rate. W. O. Bernhardt and R. A. McGinnis 118
– raw juice. R. Bretschneider *et al.* 376
– thick juice. R. Hurasky. (Abs.) 371
– – – L. R. Lott and G. R. Hales 87
– – – M. Škrábal. (Abs.) 23
raw sugar caking. A. P. Gupta and M. Narain. (Abs.) 278
refined sugar caking. D. F. Bagster 263, 298
– – warehouse. Anon. (Abs.) 88
white sugar micro-organisms. Y. Saray. (Abs.) 87
– – in Turkey. Y. Saray. (Abs.) 54
Storage, Beet. M. Z. Khelemskii. (Abs.) 23
J. F. T. Oldfield and J. V. Dutton 209
beet deep-freezing. M. M. Vissarionov and K. G. Teregulov. (Abs.) 279
– downy mildew effects. J. Zdárský 152
– spoilage. L. D. Kazenas. (Abs.) 55
– – prevention. J. Trzebiński. (Abs.) 340
– – varietal resistance. M. I. Zhigallo. (Abs.) 55
– topping and infection. S. Pelciarić and M. Milić. (Abs.) 279
equipment. (T.N.) 62
fungi. Y. S. Toporovskaya. (Abs.) 311
losses. P. Devillers. (Abs.) 180
– reduction with moist air. V. Z. Zhadan *et al.* (Abs.) 87
pile covers. W. Trzciński and J. Malec. (Abs.) 86
– forced ventilation. A. M. Elagin and A. E. Gelunov. (Abs.) 22
– – – L. Fekete and L. Zamecsnik 371
– – – A. Graf. (Abs.) 310
– – – A. Havránek *et al.* (Abs.) 180
– – – V. Hrdlička and V. Valter 22
– – – V. Semenenko and A. Solov'ev 22
– – – W. Trzciński and J. Malec 245
– temperature, O_2 and CO_2 determination. B. Homolar. (Abs.) 310
piling equipment. L. Jurewicz. (Abs.) 118
– – J. Strzerzysz. (Abs.) 340
in Poland. M. Milosz. (Abs.) 245
UK. O. J. Staines. (Abs.) 143
washed beet. M. Dambroth. (Abs.) 372
– – W. Trzciński and J. Malec. (Abs.) 280
Storage, Molasses: in South Africa. Anon. (Abs.) 147
spontaneous combustion. D. J. Mehta *et al.* (Abs.) 145
Storage, *see also* Bulk storage
Stork-Werkspoor Sugar N.V. cane sugar factory order. (Brev.) 158
Strainer. (T.N.) 189
– operation. L. D. Díaz L. (Abs.) 243
Sucrose: beet content and osmolality. A. E. Goodban and R. M. McCready. (Abs.) 89
crystal, effect of adsorbed impurities. A. VanHook. (Abs.) 250
– enclave inclusions. D. L. Mackintosh and E. T. White. (Abs.) 57

PAGE

Sucrose; crystal shape determination. A. L. Jones 57
decomposition autocatalysis. S. Z. Ivanov *et al.* (Abs.) 377
– in boiling. L. I. Trebin *et al.* 153
– effect of non-sugars. Z. A. Mil'kova *et al.* (Abs.) 28, 216
– – pH and temperature. A. R. Sapronov and S. E. Kharin 90
– in heated sugar solution. L. I. Trebin *et al.* (Abs.) 183
– by lime. F. Schneider *et al.* (Abs.) 283
derivatives. L. Hough. (Abs.) 184
determination with borax. J. Fernández B. and J. Marinello M. 89
– by isotope dilution. T. A. McGagin and F. G. Els. (Abs.) 119
– – – W. Mauch. (Abs.) 378
dextrose and levulose recovery. K. Lauer *et al.* (Pat.) 348
diffusion constant. K. Vukov. (Abs.) 251
ester preparation. Anon. (Abs.) 218
– – Cassella Farbwerke Mainkur AG. 380
– – M. Raaný *et al.* (Abs.) 29
– surface-active agent. Raffinerie Tirlemontoise S.A. (Pat.) 125
– – – H. L. Sanders. (Pat.) 316
– – – H. Simonis. (N.B.) 26
other production. J. A. Reeder *et al.* 92
hydrolysis. K. J. Parker. (Abs.) 184
incorporation in melamine resins. W. Flavell and G. L. Redfearn 218
ion exchange kinetics. V. P. Meleshko and M. V. Rozhkova. (Abs.) 180
– exclusion. D. N. Sutherland and C. B. Mountfort. (Abs.) 27
phosphate as animal fodder. J. Gagolski and B. M. Smythe. (Pat.) 220
– purification by electrodialysis. R. G. Campbell and C. C. Oldenburg. (Pat.) 316
– recovery. Colonial Sugar Refining Co. Ltd. (Pat.) 220
– synthesis. J. G. Buchanan. (Abs.) 218
– – R. G. Campbell *et al.* (Pat.) 123
– – J. H. Curtin and J. Gagolski 123
– – and electrodialysis. Stauffer Chemical Co.. (Pat.) 381
polyether polyol production. Imperial Chemical Industries Ltd. 60
solubility. A. Smelík *et al.* (Abs.) 378
– effect of non-sugars. N. P. Silina 183
solution boiling point elevation calculation. V. I. Tuzhilkin and I. N. Kaganov. (Abs.) 27
– conductivity ash measurements. F. Schneider *et al.* (Abs.) 251
– density. P. X. Hoynak and G. N. Bollenback. (N.B.) 151
– molecular diffusion. L. P. Zhmyrya *et al.* (Abs.) 250
– negative turbidity 304
– refractive indices. K. Rosenhauer *et al.* (N.B.) 312
– thermodynamics. V. I. Tuzhilkin and I. N. Kaganov. (Abs.) 119
– vapour pressure. V. I. Tuzhilkin and I. N. Kaganov. (Abs.) 119
synthesis in cane. J. A. Bonnet 335
– – D. W. Fewkes. (Abs.) 205
– green plants. J. Edelman. (Abs.) 205
– – – D. A. Walker. (Abs.) 205
translocation in beet. P. Trip. (Abs.) 143
– – effect of light. D. Habeshaw 51
– plant cells. D. C. Spanner. (Abs.) 205
urethane production and properties. W. Gerhardt. (Abs.) 92
see also Crystallization; Polarization; Solubility; Sugar *and* Sugars
Sudan new sugar factory proposal 96, 133
Sugar. Anon. (N.B.) 56
agglomeration. W. J. Megowen 186
animal fodder. Anon. (Abs.) 91
– – N. P. Bray. (Pat.) 59
– – V. Henry. (Abs.) 121
– – N. A. Macleod *et al.* (Abs.) 218
– – R. Perez *et al.* (Abs.) 121
areado sugar. J. Cunha da Silveira 150
by-products utilization. C. R. Bonati. (Abs.) 29
– – research. Anon. (N.B.) 249
– – – J. L. Hickson. (Abs.) 218
Codex Alimentarius Commission standards. C. B. Broeg. (Abs.) 184
colour, effect of amino-acids. A. R. Sapronov *et al.* (Abs.) 183
– measurement. P. Devillers *et al.* 283
conductimetric purity determination. M. Králová and V. Valter. (Abs.) 345
detection in boiler feed water. Anon. 340

INDEX

Sugar; PAGE
detection in waste water. Svenska Sockerfabriks AB. (Pat.)..... 58
drying and cooling by fluidization. S. Vermes. (Abs.) 371
dust control. B. A. Stephens. (Abs.) 248
– explosions. A. V. Dan'ko and A. M. Kostenyuk. (Abs.)....212, 247
– – G. Schneider. (Abs.)..... 214
– – and particle size. G. Schneider 149
economic pocket book 1969. Anon. 56
history. E. O. von Lippmann. (N.B.) 344
impurities inclusion. T. Ando *et al.* 376
– – R. P. Jennings. (Abs.)..... 90
industry literature guide. M. Schalit 312
– Technologists Inc. Meeting 1970 96
International Sugarmark. (N.C.).. 33
inversion. R. E. Abbott. (Pat.)..... 317
mechanical handling. J. Ponant .. 214
micro-organisms in Poland. I. Januszewicz and K. Mossakowska 280
moisture calculation. J. Turcaj and L. Neužil. (Abs.)..... 118
quick-dissolving sugar production. M. Amano *et al.* (Pat.)..... 186
solution continuous analysis. Hawaiian Development Co. (Pat.)..... 93
– – – G. E. Sloane and K. M. Onna 188
– heat transfer. N. Y. Tobilevich *et al.* (Abs.) 184
– – – effect of vibrations. D. E. Sinat-Radchenko and V. D. Popov. (Abs.)..... 184
– ion exchange treatment. (T.N.).. 62
– – – S. A. Brenman *et al.* (Abs.).. 88
– pH and temperature. A. R. Sapronov and T. S. Zvereva. (Abs.) 282
– physical properties. (Brev.)..... 255
– production. E. R. Allen. (Pat.) 122
– rheological and circulation properties. Y. G. Artyukhov and V. T. Garyazha. (Abs.)..... 89
– saturation. D. E. Sinat-Radchenko and V. D. Popov. (Abs.)..... 184
– thermal stability. L. I. Trebin *et al.* (Abs.) 183
– viscosity and density. A. A. Gerasimenko and Z. B. Shaposhnikova. (Abs.) 183
technology. P. M. Silin. (N.B.)..... 26
– glossary. C. A. Müller. (N.B.)..... 344
– reviews. G. H. Jenkins. (N.B.).. 151
tooth decay. (Brev.)..... 288
US trade date. Anon. (N.B.)..... 25
weighing. A. A. Rozinskii and V. I. Kostyuk. (Abs.)..... 87
world balance 1968/69. (N.C.)..... 34
– – 1969/70. (N.C.) 65, 163
– per caput consumption. (Stat.).. 64
– market prospects. (N.C.)..... 33
– production 1969/70 2, 31, 130, 161, 289, 319
year book 1968. (N.B.) 151
see also Bulk handling; Bulk storage; Bulk transport; Crystallization; Liquid sugar; Polarization; Raw sugar; Refined sugar; Sucrose *and* White sugar
Sugars: bagasse hydrolysis products. L. Nobile. (Pat.)..... 317
dissociation. S. Z. Ivanov and E. S. Lygin. (Abs.)..... 28
esters production. Cassella Farbwerke Mainkur AG. (Pat.)..... 380
– as surface-active agents. F. Schneider and H. U. Geiger.. 29
hexose reaction with amino-acids. K. J. Parker. (Abs.)..... 184
intramolecular hydrogen bridges in pyranose acetals. J. Bartsch.. 345
kestose formation. H. Bourzutschky and W. Mauch. (Abs.)..... 283
location on paper chromatograms by dipping reagents. J. F. Clapperton and I. C. MacWilliam. (Abs.)..... 346
oligosaccharides and needle-shaped crystal formation. M. Kamoda *et al.* (Abs.)..... 376
palatinose derivatives. F. Loss.. 119
raffinose and galactose determination. H. Schiweck and L. Büsching 120
removal from waste by activated sludge. H. A. Painter *et al.* (Abs.) 250
separation by column chromatography. P. Vrátný. (Abs.)..... 251
solutions CO_2 hydration. J. Vašátko *et al.* (Abs.) 283
synthesis and movement in beet. V. D. Sakalo and I. G. Vijval'ko 113
see also Dextrose; Invert sugar; Levulose; Raffinose; Reducing sugars *and* Sucrose

Sulphitation: continuous, optimum temperature. B. B. Paul *et al.*.. 116
juice deaeration. S. C. Gupta *et al.* 145, 177
mud formation. B. L. Mittal. (Abs.) 115
– settling. S. C. Gupta *et al.* (Abs.) 145
sugar browning products formation. H. Polleres. (Abs.) 310
syrup sulphiter. B. B. Paul. (Abs.) 177, 308
Sulphur: burner air flow measurement. G. D. Chansarkar. (Abs.) 145
Surface-active agents. (T.N.)..... 158
effect on massecuite boiling..... 304
– – Anon. (Abs.) 178
– – Fabcon Inc. (Pat.)..... 125
– – J. R. Gomeri and A. M. Alcala 244
– – C. M. Madrazo. (Abs.)..... 178
– – K. A. Shah *et al.* (Abs.)..... 308
– – D. Tanco. (Abs.)..... 178
– sucrose crystallization rate. B. Shamirian. (Abs.)..... 314
product.on from sucrose. H. L. Sanders. (Pat.)..... 316
– sugars. F. Schneider and H. U. Geiger. (Abs.)..... 29
refinery liquor treatment..... 303
scale reduction in evaporators. Fabcon Inc. (Pat.)..... 380
– – – R. Maloney. (Abs.) ..20, 277, 338
sucrose N-alkylsulphonyl urethanes. W. Gerhardt. (Abs.)..... 92
– ester detergents. H. Simonis .. 26
– and molasses esters. Raffinerie Tirlemontoise S.A. (Pat.).... 125
Swaziland: leaf scald disease. G. M. Thomson. (Abs.)..... 274
sugar production 1969/70. (Brev.).. 320
Sweden: sugar exports 1969. (Brev.) 351
– factory closure. (Brev.)..... 95
– industry. S. Zagrodzki and H. Zaorska. (Abs.)..... 118
– manufacture and refining. A. Laudon. (N.B.)..... 249
Switzerland: beet harvesters. H. Meyer 50
sugar economy. (N.C.)..... 98
– imports. (Stat.)..... 192
Syrup: centrifuging. A. Babin. (Abs.) 372
electrodialysis. I. F. Zelikman *et al.* 23
invert syrup production. R. Kunin 177
– – – from cane juice. O. Valsechi 92
pH measurement, effect of dilution. E. C. Vignes. (Abs.) 152
sorghum syrup and cane syrup analysis. A. R. Johnson and A. T. Sturdivant. (Abs.)..... 27
sulphitation tower. B. B. Paul.. 177, 308
tank residue composition. G. Vavrinecz. (Abs.)..... 90
viscosity and density. A. A. Gerasimenko and Z. B. Shaposhnikova.. 183
see also Juice, Beet; Liquid sugar; Refinery *and* Refining

Tablet sugar press. L. J. Chambon.. 123
– – *see also* Cube sugar
Taiwan: bagasse board production. C. S. L. Chiu. (Abs.) 91
– – – H. C. Tao. (Abs.)..... 91
by-products utilization. H. S. Wu 121
cane agriculture. P. Y. Ho. (Abs.) 109
– mechanization and transport. W. C. Hsu. (Abs.)..... 306
– ratoon stunting. C. S. Wang. (Abs.) 13
chemical weed control. S. Y. Peng 106, 207
– – – S. Y. Peng and W. B. Sze.. 274
– – – and intercropping. S. Y. Peng and W. B. Sze. (Abs.).... 305
diversification. (Brev.)..... 351
soil salinity. L. S. Kuo. (Abs.).... 366
sugar exports 1969. (Brev.)..... 256
typhoon damage. (Brev.)..... 63
Tanzania sugar industry. H. J. Delavier and H. Hirschmüller. (Abs.) 146
– Verenigde HVA-Mij. N.V. report 1969. (Brev.)..... 320
Tate & Lyle Ltd.: analytical methods. R. W. Plews. (N.B.)..... 249
bone char firm acquisition. (Brev.) 254
cane research..... 270
Caroni Ltd. share disposal. (N.C.).. 290
granular carbon *vs.* bone char in refining. A. M. Moult. (Abs.).... 375
refined sugar bulk silo. E. C. Tubb 150
refinery natural gas supply. (Brev.) 350
report 1969. (N.C.)..... 163
Research Centre move. (Brev.).... 288
sugar research..... 303
white sugar bulk transport in France 350

Thailand bagasse paper factory. (Brev.) 189
International Sugar Agreement accession. (Brev.) 32
Tongaat Sugar Co. Ltd. 1970 report.. 354
Trade Notices: A.B.M. Industrial Products Ltd. 285
Actuated Controls Ltd.....189, 286, 350
Agro Industrial Associates Inc..... 285
Anacon Inc. 94, 158, 286
A.P.V. Co. Ltd..... 62
Basic Chemicals..... 30
Bellingham & Stanley Ltd..... 221
Bennett, Sons & Shears Ltd..... 350
Braunschweigische Maschinenbauanstalt 62
Peter Brotherhood Ltd. 254
Bühler Brothers Ltd. 62
Callow Engineering Ltd..... 222
A/S De Danske Sukkerfabrikker.. 62, 94
Daystrom Ltd. 62
Dendix Brushes Ltd..... 30
Dorr-Oliver Inc. 62, 94, 189, 254
Driver Southall Ltd..... 61
Du Pont de Nemours International S.A. 350
Effluent Control International Ltd. 286
Elliott Division of Carrier Corp..... 158
EMI Electronics and Industrial Operations 254
Ewart Chainbelt Co. Ltd..... 158
Farm Protection Ltd. 126
Flexible Drives (Gilmans) Ltd..... 222
Frampton Ferguson Ltd..... 254
Gough Econ Ltd. 254
J. Barcham Green Ltd..... 94
Honeywill-Atlas Ltd. 158
Howe Richardson Scale Co. Ltd... 62, 350
Jones Cranes Ltd..... 94
Klöckner-Humboldt-Deutz AG..... 62
Marshall Conveyors Ltd..... 222
Massey Ferguson (Export) Ltd... 30, 285
F. W. McConnel Ltd. 382
M. E. Boilers Ltd..... 254
Mechanical Handling Engineers' Association. 222
Metering Pumps Ltd. 350
G. A. Platon Ltd..... 286
Polar Group 61
Renold Ltd. 30, 222
Rex Chainbelt Inc. 62, 94, 158, 222, 286, 350
Salzgitter Maschinen AG. 222
Serck Radiators..... 189
Shell International Chemical Co. Ltd. 62
Sonicaid Ltd. 62
Stainless Steel Fabricators' Association of Great Britain 286
Stainless Steel Pumps Ltd..... 94
Stork-Werkspoor Sugar N.V. 158, 221, 286
Technoexport 62
Thirty Ninety Eight Co. Ltd..... 61
Thorn Automation Ltd. 30
Ulrich Walter..... 222
Western States Machine Co. 189
Carl Zeiss..... 318
Transport, Beet: and campaign length. A. Huculak. (Abs.)..... 148
Transport, Cane: cane car distribution. J. B. Santos. (Abs.)..... 239
– haulage bins in Australia. Anon. 273, 336
– – – L. F. J. Prince. (Abs.)..... 47
four-wheeled trailer. Anon. (Abs.) 368
locomotives for Egypt. (Brev.).... 382
– performance. C. R. Murry and R. A. James. (Abs.)..... 52
in Philippines. Anon. (Abs.)..... 15
Puerto Rico. C. V. Rodriguez 208
railway ballast tamping. L. S. Edwards. (Abs.)..... 53
– curve adjusting. H. D. Webber 53
– rolling stock utilization. C. R. Murry and E. E. Shepherd .. 52
– scheduling to reduce cane deterioration. Anon. (Abs.)..... 16
– – – G. Heritage *et al.* (Abs.) 52, 205
– – – R. P. Vickers and L. P. Schafer. (Abs.) 47
in Taiwan. W. C. Hsu. (Abs.).... 306
Transport, Sugar: by barge in the Philippines. R. N. Navarro. (Abs.) 248
international pneumatic transport conference. (Brev.) 383
ships. W. D. Talkenberger. (Abs.) 84
Transport, *see also* Bulk transport
Trinidad: bagasse board production plans. (Brev.)..... 352
Caroni Ltd. control purchase..... 290
– – report 1968/69. (N.C.)..... 2
new refinery. (Brev.) 32
sugar production 1969. (Brev.).... 96
– – 1970. (Brev.) 384

INDEX

PAGE

Tubes: corrosion resistance. G. Trabanelli *et al.* (Abs.) 373
evaporator, corrosion. P. Devillers *et al.* (Abs.) 245
– – A. de la Motte. (Abs.) 371
– length and performance. N. Y. Tobilevich *et al.* (Abs.) 149
– optimum length. V. V. Maiorov and L. P. Maiorova. (Abs.) 247
– silicone treatment. M. Wiekluk .. 54
– steam side cleaning. R. D. Joshi 278
expanding. S. Houghton. (Abs.) .. 21
flaw measurement. S. R. Durrell .. 21
inspection probe. (T.N.) 158
stainless steel *vs.* copper. J. A. Cotner. (Abs.) 146
see also Piping *and* Scale
Tunisia: irrigation project. (Brev.) .. 256
– sugar industry. (Brev.) 32
Turbidity: refined and white sugar. S. Hase *et al.* (Abs.) 346
– sucrose solution negative turbidity 304
Turbines, *see* Steam turbines
Turkey: beet leaf spot control. M. Göbelez. (Abs.) 83
citric acid factory. (Brev.) 256
limestone consumption. P. Güray 246
Olier beet diffuser operation. H. Gelen. (Abs.) 118
white sugar storage. Y. Saray. (Abs.) 54

Uganda: cane disease research. P. Rogers. (Abs.) 81
sugar production and exports 1969 288
– situation. (Brev.) 63
Union of Soviet Socialist Republics: automatic beet thinner. (Brev.) .. 64
beet campaign length. E. F. Kazakov 247
– – – N. V. Kheize *et al.* 247
– – – S. I. Podgaets *et al.* (Abs.) .. 341
– – – M. S. Sabanskii and M. P. Priimak. (Abs.) 341
– knives. V. N. Shchegolev. (Abs.) 341
– molasses betaine, glutamic acid and nitrogen contents. E. A. Grivtseva *et al.* (Abs.) 153
– spacing trials. A. V. Dobrotvortseva. (Abs.) 50
– storage research. M. Z. Khelemskii 23
– varietal trials. N. S. Yakimenko 51
– varieties. N. S. Yakimenko. (Abs.) 113
– – S. P. Sevost'yanov. (Abs.) 113
Kirgiz sugar factories. A. S. Gal'perin and M. T. Ibragimov. (Abs.) 55
sugar industry expansion. (Brev.) .. 255, 384
– packaging, bulk storage and transport. I. S. Chupak and L. A. Rozental'. (Abs.) 87
– production 1969/70. (Brev.) 159, 194
United Kingdom: beet agriculture. G. Parkinson. (Abs.) 19
– breeding for disease resistance. G. E. Russell. (Abs.) 242
– harvester demonstration. Anon. 19, 50
– loading. Anon. (Abs.) 50
– mechanization demonstrations 18, 32, 143, 337
– pests. F. G. W. Jones and R. A. Dunning. (N.B.) 151
– price 1971. (N.C.) 322
– research. (N.C.) 161
– storage. O. J. Staines. (Abs.) .. 143
– thinning. L. F. Hanbury. (Abs.) 50
– varietal trials. L. A. Willey. (Abs.) 143
– – – L. A. Willey and S. F. H. McCullagh. (Abs.) 112
– varieties. Anon. (Abs.) 112
– virus yellows control. R. Hull .. 113
– – – distribution. G. E. Russell .. 19
bone char manufacturer acquired .. 254
British Sugar Bureau study of sugar chemical weed control. M. G. Allen *et al.* (Abs.) 113
– – – D. H. Bartlett and R. A. Jones 113
– – – D. H. Bartlett *et al.* (Abs.) .. 112
– – – W. E. Bray. (Abs.) 82
– – – C. J. Edwards. (Abs.) 112
– – – H. M. Holmes. (Abs.) 112
Commonwealth Sugar Agreement and EEC membership. (N.C.) 225, 322
food industries manual. A. Woollen 182
glucose refinery plant order. (Brev.) 350
magnesium fertilizer experiments. A. P. Draycott and M. J. Durrant 143, 144
new pump company formed. (Brev.) 30
raw sugar warehouse. Anon. (Abs.) 281
refined sugar prices. (N.C.) 66
refinery adoption of natural gas fuel 350

PAGE

United Kingdom:
Sugar Board annual report. (N.C.) 162
– – surcharge 32, 66, 130, 192, 223, 226, 352
– imports and exports 98, 127
– production 1969/70. (Brev.) 98
see also British Sugar Corporation Ltd. *and* Tate & Lyle Ltd.
United States of America: Arizona beet diseases. E. G. Ruppel. (Abs.) .. 83
– – – E. G. Ruppel and R. J. Bird 369
beet agriculture. V. W. Baird. (Abs.) 209
– – prospects. B. E. Easton. (Abs.) 82
– area 1970. (Brev.) 128, 192
– – 1971. (Brev.) 320
– breeding for yellows resistance. J. S. McFarlane *et al.* (Abs.) .. 307
– harvester manufacturer. (Brev.) 126
– juice ion exchange treatment. S. E. Bichsel and D. A. Hoover 246
– seed sowing experiments. H. F. Mayland and J. W. Cary. (Abs.) 51
– varieties. J. S. McFarlane and I. O. Skoyen. (Abs.) 144
– winter yellows virus. J. E. Duffus 307
California chemical weed control. B. B. Fischer and L. K. Beutler 144
– overhead irrigation. D. W. Henderson *et al.* (Abs.) 82
– refinery packaging plant. Anon. 24
– R. T. beet diffuser. Anon. (Abs.) 372
cane agriculture. F. Delgado. (Abs.) 239
– breeding. L. L. Lauden. (Abs.) .. 368
– – for mosaic resistance. P. H. Dunckelman and R. D. Breaux 275
– harvesting. J. E. Clayton. (Abs.) 110
– – research. J. E. Clayton and H. D. Whittemore. (Abs.) .. 110
– hybridization with wild canes. L. L. Lauden. (Abs.) 15
– mosaic and maize dwarf mosaic viruses. R. D. Pares. (Abs.) .. 80
chemical weed control. P. B. Smith 242
– – – C. van der Schans. (Abs.) .. 241
Florida cane breeding. N. I. James 207
– – handling at Okeelanta. A. Kirstein and P. A. Carreno .. 20
– chemical weed control. J. R. Orsenigo. (Abs.) 13
– Everglades refinery. J. W. Alberino. (Abs.) 88
– nematode control trials. J. A. Winchester. (Abs.) 81
– raw sugar bulk handling. A. Acosta. (Abs.) 211
Louisiana cane borer. S. D. Hensley and L. F. Martorell. (Abs.) 17
– – – control. S. D. Hensley. (Abs.) 368
– – – infestation. L. J. Charpentier *et al.* (Abs.) 17
– – breeding. R. D. Breaux and P. H. Dunckelman. (Abs.) .. 207
– – – P. H. Dunckelman and R. D. Breaux. (Abs.) 140
– – diffuser operation. P. P. Strich 20
– – hybridization with wild cane. P. H. Dunckelman and R. D. Breaux 43
– – leaf scald threat. S. J. P. Chilton and R. J. Steib. (Abs.) 15
– – mosaic. G. T. A. Benda. (Abs.) 368
– – – control. Anon. (Abs.) 17
– – pest control. Anon. (Abs.) 110
– – stalk breakage by wind. L. L. Lauden. (Abs.) 207
– – varieties. Anon. (Abs.) 240, 335
– – – S. J. P. Chilton and R. J. Steib. (Abs.) 15
– – – R. J. Matherne. (Abs.) 15, 366
– – – mosaic resistance. R. D. Breaux and P. H. Dunckelman. (Abs.) 367
– fertilizer trials. R. Ricaud. (Abs.) 111
– frost effect on cane. J. E. Irvine 15
– herbicide aerial application. D. C. Mattingly. (Abs.) 16
– L62-96 cane variety. Anon. (Abs.) 204
– nematode control. W. Birchfield 175
Maine beet piling equipment. (T.N.) 62
mainland cane area 1971. (Brev.) .. 288
National Committee of ICUMSA meeting. (Brev.) 160
New Mexico beet planting data trials. W. J. Russel. (Abs.) 144
– refinery. (Brev.) 64
– sugar contract. (Brev.) 192
raw sugar prices. (N.B.) 56, 182
refinery pollution reduction. (Brev.) 32
– – – by waste water treatment. G. S. Baumert. (Abs.) .. 375
sugar imports. (Stat.) 255
– – limitations. (Brev.) 95

PAGE

United States of America:
sugar and molasses production and trade. Anon. (N.B.) 25
– supply quota 1969. (Brev.) 63
– – – 1970 ..... 34, 63, 226, 322
tare laboratories. C. L. Schmalz *et al.* 282
Texas cane project. (Brev.) 191
– refined sugar warehouse. Anon. 88
thick juice storage. R. Hurasky .. 371
Washington beet sugar factory expansion. (Brev.) 351
– potassium fertilizer trials. D. W. James *et al.* (Abs.) 18
see also Hawaii
Uruguay new sugar factory. (Brev.) .. 384

Valves. (T.N.) 62
– centrifugal masseeuite feed. M. I. Il'in and V. I. Pugachev. (Abs.) 117
Varieties, Beet: aphis resistance. R. L. Wallis and J. E. Turner. (Abs.) .. 18
bolting. L. A. Willey. (Abs.) 337
– resistance. L. A. Willey. (Abs.) 19
in France. Anon. (Abs.) 209
rotting resistance in storage. M. I. Zhigalio. (Abs.) 55
trials in Belgium. N. Roussel and R. van Stallen. (Abs.) 83
– India. P. S. Deshpande and N. G. Perur. (Abs.) 369
– – V. P. Vaidya. (Abs.) 276
– UK. L. A. Willey. (Abs.) 143
– – L. A. Willey and S. F. H. McCullagh. (Abs.) 112
– USSR. N. S. Yakimenko. (Abs.) 51
in UK. Anon. (Abs.) 112
US. J. S. McFarlane and I. O. Skoyen. (Abs.) 144
USSR. S. P. Sevost'yanov. (Abs.) 113
– N. S. Yakimenko. (Abs.) 113
yellows virus resistance. F. I. Hills *et al.* (Abs.) 307
– – – J. S. McFarlane *et al.* (Abs.) 307
see also Beet breeding
Varieties, Cane: in Argentina. R. F. de Ullivarri and G. Kenning V. .. 275
Australia. I. T. Freshwater. (Abs.) 142
B 60267. (Brev.) 128
in Brazil. L. P. Velloso. (Abs.) 366
Co 312 drought resistance mechanism. K. M. Naidu and K. V. Bhagyalakshmi. (Abs.) 13
Co 6911. N. K. Parik. (Abs.) 175
deterioration after harvesting in Mexico. M. Pineda L. (Abs.) 306
disease resistance in India. M. R. Kelkar. (Abs.) 14
drought resistance. U. S. Singh and V. S. Negi. (Abs.) 48
in Fiji. Anon. (Abs.) 79
herbicide tolerance. R. W. Millhollon and R. J. Matherne. (Abs.) 79
– – R. V. Osgood *et al.* (Abs.) 110
in Jamaica. M. D. S. Richards. (Abs.) 111
L.62-96. Anon. (Abs.) 204
– L. L. Lauden. (Abs.) 141
maize dwarf mosaic susceptibility. A. G. Gillaspie. (Abs.) 80
in Mexico. A. González G. (Abs.) .. 111
– B. Ortiz V. (Abs.) 141
mosaic resistance. R. D. Breaux and P. H. Dunckelman. (Abs.) 367
– – L. L. Lauden. (Abs.) 368
multiple releases to meet different conditions. S. J. P. Chilton and R. J. Steib. (Abs.) 15
N:Co 310 flowering prevention tests. J. E. Barnes. (Abs.) 46
N:Co 330 descendants. F. T. Aala 239
nitrogen fertilizer response in India. I. J. Singh and P. P. Singh 167
in Pakistan. H. Ahmad and N. D. Yusuf. (Abs.) 275
Philippines. F. T. Aala. (Abs.) .. 109, 239
– J. N. Gibe and F. I. Ledesma .. 240
photoperiod effects. A. Jabbar and N. D. Yusuf. (Abs.) 275
preferential destruction by wild pigs. C. M. McAleese. (Abs.) 16
Q 85 ratooning trials. I. T. Freshwater. (Abs.) 16
red rot resistance. G. P. Singh and N. Singh. (Abs.) 111
stem epidermis differences in South Africa. G. Roth. (Abs.) 48
trials in Philippines. N. S. Divinagracia *et al.* (Abs.) 239
– – A. M. Galvez *et al.* (Abs.) 240
– – E. P. Lapastora *et al.* (Abs.) .. 208

INDEX

PAGE

Varieties, Cane;
trials in Sicily. R. Sarno. (Abs.).. 79
– Virgin Islands. A. J. Oakes and R. M. Bond. (Abs.)..... 305
in US. Anon. (Abs.) 240, 335
– R. J. Matherne. (Abs.).....15, 366
yields in water-logged and saline soils. S. Fasihi and H. Ahmad.. 273
see also Cane breeding
Venezuela: bagasse board production. Anon. (Abs.) 284
La Pastora sugar factory. F. Cordovez. (Abs.)..... 146
sugar factory expansion order for UK. (Brev.) 126
Verenigde HVA-Mij. N.V. report 1969 320
Vinasse, *see* Distillery waste
Virgin Islands cane varietal trials. A. J. Oakes and R. M. Bond. (Abs.) 305
– – fertilizer experiments. A. J. Oakes and O. Skov. (Abs.)..... 16
Viscosity: sugar solution and syrup. A. A. Gerasimenko and Z. B. Shaposhnikova. (Abs.) 183

Water: beet diffusion. R. Pieck. (Abs.) 214
boiler feed sucrose detection. Anon. 340
– – treatment. H. Anders. (Abs.) 54
calculation in sugar. J. Turcaj and L. Neužil. (Abs.)..... 118
cane leaf sheath moisture and yield. T. R. Srinivasan and A. Mariakulandai. (Abs.)..... 366
– usage. P. C. Ekern. (Abs.)..... 110
– – effect of gibberellic acid. A. G. Alexander. (Abs.)..... 241
catchment in Australia. Anon. (Abs.) 335
condensate acids. E. R. Shiring and A. Y. Zagorul'ko. (Abs.)..... 28
– treatment for diffusion. A. A. Pyshnaya. (Abs.)..... 55
determination in molasses. S. Stachenko. (Abs.) 215
– refined sugar. H. Mašková and L. Neužil. (Abs.)..... 119
economy in Hungarian sugar factories. K. Hangyál. (Abs.)..... 340
grit separator. G. Slajchert. (Abs.) 114
hydrocyclone treatment. A. M. Fominykh. (Abs.)..... 149
ion exchange treatment. (T.N.).... 286
loss prevention in storage reservoirs. G. Renfro. (Abs.)..... 207
in refined and white sugar. S. Hase *et al.* (Abs.) 340
separation from beet. N. M. Datsenko *et al.* (Abs.) 213
strainer. (T.N.)..... 189
sugar determination. Svenska Sockerfabriks AB. (Pat.) 58
treatment plant. (T.N.)..... 189
warehouse automatic humidity control. Anon. (Abs.)..... 211
white sugar bound moisture and bulk storage. L. K. Sereda. (Abs.).... 148
Water, Waste: BOD determination. D. Bevan and J. C. Stevenson. (Abs.) 89
disposal in Hungary. I. Radics.. 311
filter screen. M. Sterzinger. (Abs.) 118
flume-wash water treatment. Z. Zingel'. (Abs.)..... 372
hydrocyclone treatment. A. M. Fominykh. (Abs.)..... 149
ion exchange treatment. K. H. F. Mehls. (N.B.)..... 26
micro-organisms. F. Schneider. (Abs.) 117
press water bacterial treatment. O. Vejbora *et al.* (Abs.) 340
– – micro-organisms determination. E. A. Khodurskii and N. S. Chechel'. (Abs.) 217
– – recycling to diffusion. E. Slavíček and K. Sekl. (Abs.) 149
Steffen waste treatment. K. Ichikawa *et al.* (Abs.) 55
sugar determination. Svenska Sockerfabriks AB. (Pat.) 58
sugars removal by activated sludge. H. A. Painter *et al.* (Abs.)..... 250
treatment. H. Laguerre. (Abs.)..... 374
– D. R. Parashar. (Abs.)..... 85, 145
– P. D. Smith and H. W. Archer.. 146
– J. M. Tigiao. (Abs.)..... 210
– R. A. Tsugita *et al.* (Abs.)..... 245
– by aerator. D. Bevan. (Abs.).. 53
– and disposal in Hawaii. J. C. Schantz and F. N. Kemmer.. 370

PAGE

Water, waste; treatment with flocculants. P. Devillers *et al.* .. 86
– – M. Roche. (Abs.) 214
– in Hungary. K. Hangyál. (Abs.) 54, 340
– investigation in Australia. (Brev.) 128
– by lagooning. P. Devillers *et al.* 371
– plant. (T.N.)..... 189
– and recirculation. W. W. Blankenbach and W. A. Willison. (Abs.) 311
– – in a refinery. G. S. Baumert.. 375
– by reverse osmosis. G. Vernois.. 23
utilization in beet diffusion. H. Gelen 118
Water, *see also* Drying; Irrigation; Milling, Cane *and* Weather
Wax, Cane: and cane diffusion. A/S De Danske Sukkerfabrikker. (Abs.).. 244
fats. D. A. Navia M. (Abs.)..... 315
fractionation. M. Streibl and K. Stránský. (Abs.) 217
Weather: cane damage by lightning. Anon. (Abs.)..... 81
– flowering effects. T. Chu and J. L. Serapion. (Abs.)..... 367
– frost damage. J. E. Irvine. (Abs.) 15, 305
– – resistance determination. J. E. Irvine. (Abs.)..... 45
– nutrient deficiency and drought resistance. K. N. Lal *et al.*.. 14
– stalk breakage by wind in Louisiana. L. L. Lauden. (Abs.).... 207
– sucrose content. A. González G. 14
– varietal drought tolerance. U. S. Singh and V. S. Negi. (Abs.).. 48
cyclone damage in Mauritius. (Brev.) 192
drought in Fiji. (Brev.)..... 32
– Philippines. C. M. Madrazo. (Abs.) 210
– Queensland. Anon. (Abs.) 204
– and ratoon stunting. Anon. (Abs.) 273
– – D. R. L. Steindl. (Abs.).... 142
– resistance mechanism of Co 312 cane variety. K. M. Naidu and K. V. Bhagyalakshmi. (Abs.) 13
Europe beet harvest prospects. (N.C.) 194
flood damage in Brazil. (Brev.).... 320
– – Morocco. (Brev.) 64, 96
hail injury and beet yields. O. Neeb and C. Winner. (Abs.)..... 307
high temperature and beet wilting. R. A. Kohl and J. W. Cary. (Abs.) 369
low temperature and cane juice quality. R. R. Panje *et al.* (Abs.) 273
typhoon damage in Philippines. P. Esleyer. (Abs.)..... 109
– – Taiwan. (Brev.)..... 63
Weeds: and cane competition. G. M. Azzi *et al.* (Abs.)..... 45
chemical control. Anon. (Abs.)....16, 113
– – G. M. Chambers. (Abs.).....45, 173
– – W. N. L. Davies. (Abs.)..... 45
– – L. Detroux and J. M. Belien.. 144
– – L. Detroux *et al.* (Abs.)..... 176
– – A. D. Dotzenko and M. Ozkan 83
– – A. G. Gallarate. (Abs.) 337
– – M. Martens and J. M. Belien.. 176
– – W. F. Meggitt. (Abs.)..... 143
– – D. R. Roebuck. (Abs.) 83
– – N. Vega O. (Abs.) 368
– – A. Velazco P. (Abs.)..... 46
– – A. Vetter and W. Völker. (Abs.) 209
– – in Argentina. E. A. Cerrizuela 207
– – Australia. J. Anderson. (Abs.) 336
– – – L. S. Chapman. (Abs.) 47
– – – C. M. McAleese. (Abs.)..... 336
– – – and US. C. van der Schans 241
– – and beet mechanization. O. S. Rose. (Abs.) 112
– – – seed dressing. W. R. Schäufele and C. Winner. (Abs.).... 83
– – Brazil. H. de Oliveira and J. C. Ometto. (Abs.) 273
– – Canada. R. A. Fogg and W. E. Meggitt. (Abs.)..... 82
– – France. Anon. (Abs.) 209
– – Hawaii. H. W. Hilton. (Abs.) 241
– – and intercropping in Taiwan. S. Y. Peng and W. B. Sze.. 305
– – in Italy. G. Covarelli. (Abs.).. 19
– – Mexico. S. Luján C. (Abs.).... 111
– – and plant density. W. Kampe 83
– – Taiwan. S. Y. Peng.....106, 207
– – – S. Y. Peng and W. B. Sze.. 274
– – UK. M. G. Alien *et al.* (Abs.).. 113
– – – D. H. Bartlett and R. A. Jones. (Abs.)..... 113
– – – D. H. Bartlett *et al.* (Abs.).. 112
– – – W. E. Bray. (Abs.)..... 82
– – – C. J. Edwards. (Abs.)..... 112
– – – H. M. Holmes. (Abs.)..... 112
– – US. B. B. Fischer and L. K. Beutler. (Abs.) 144
– – – J. R. Orsenigo. (Abs.)..... 13

PAGE

Weeds: chem'cal control. US. E. E. Schweizer and D. M. Weatherspoon. (Abs.) 176
– – – P. B. Smith. (Abs.)..... 242
control. Anon. (Abs.)..... 306
– and cane yield. K. Dymond. (Abs.) 49
Habana oat grass control in Australia. L. S. Chapman. (Abs.)..... 141
– – – L. G. W. Tilley. (Abs.) 17
herbicide. Farbenfabrik Bayer A.G. 156
– aerial application. D. C. Mattingly 16
– application with insecticide. H. Orth and G. Maas. (Abs.)..... 143
– – nitrogen. I. J. Stewart and H. L. Boyle. (Abs.)..... 142
– boom sprayer. E. C. Gilfillan.. 49
– and cane sucrose content. A. G. Alexander and R. Montalvo Z. 367
– varietal tolerance. R. W. Millhollon and R. J. Matherne.. 79
– – – R. V. Osgood *et al.* (Abs.).. 110
– effect on cane borer egg parasite. S. R. Cornejo. (Abs.)..... 273
in India. R. P. Singh and I. D. Verma. (Abs.) 173
Johnson grass life cycle. R. J. Hull 14
– – and Raoul grass control. Anon. 81
in Philippines. Anon. (Abs.)....204, 306
seed density in beet fields. A. D. Dotzenko *et al.* (Abs.)..... 144
wild sorghum in Australia. J. F. Usher. (Abs.)..... 142
Weighers. (T.N.) 61, 62, 126, 222, 350
S. Bouček and V. Valter. (Abs.).. 337
E. R. Erdmann. (Abs.) 23
juice. J. R. Harel. (Abs.)..... 211
– R. K. Kulkarni. (Abs.)..... 308
Weighing: beet sugar factory products. A. A. Roziniskii and V. I. Kostyuk 87
cane. I. T. Freshwater. (Abs.).... 47
with radio-isotopes. J. K. Basson 90
Weir Pumps Ltd. (Brev.)..... 30
West Indies: Antigua sugar production 1970. (Brev.)..... 344
raw sugar shipping investigation.. 64
St. Kitts (Basse Terre) Sugar Factory Ltd. report 1969. (Brev.)..... 256
– – sugar crop 1969. (Brev.)..... 95
St. Vincent sugar production possibility. (Brev.)..... 351
Sugar Co. Ltd. cane land sale negotiations with Jamaican Government. (Brev.)..... 352
– – – report 1969. (N.C.)..... 130
see also Barbados; Jamaica *and* Trinidad
White sugar: analysis. S. Hase *et al.* 346
bound moisture and bulk storage. L. K. Sereda. (Abs.)..... 148
bulk storage. D. S. Shevtsov *et al.*.. 22
– transport in France. (Brev.).... 350
Codex Alimentarius Commission standard. C. B. Broeg. (Abs.).. 184
colour determination. A. Y. Zagorul'ko and L. A. Korobeinikova.. 119, 377
defeco-melt crystallization. A. C. Chatterjee. (Abs.) 278
– – – National Sugar Institute.. 309
dryer-cooler. Büttner-Werke A.G. 155
drying and cooling in fluidized bed. V. V. Zvorykin *et al.* (Abs.).... 179
lactic acid determination. J. F. T. Oldfield and M. Shore..... 3
lead and copper determination. W. Mauch *et al.* (Abs.)..... 251
packaging. V. S. Gryuner *et al.* .. 343
quality evaluation in Czechoslovakia. M. Friml. (Abs.) 217
– – E.E.C. Anon. (Abs.)..... 152
raffinose and galactinol determination. H. Schiweck and L. Büsching 120
refining. K. Hangyál. (Abs.)....251, 375
saponin determination. P. C. Hanzas and W. W. Barr. (Abs.)..... 378
storage in Turkey. Y. Saray. (Abs.) 54
trace elements. A. A. Gerasimenko *et al.* (Abs.) 282
– – determination. T. D. Carpenter and S. E. Bichsel. (Abs.).... 345
visual colour assessment and reflectance measurement. D. Hibbert *et al.*..... 227
see also Icing sugar; Refined sugar *and* Sugar
World: cane disease index. Anon... 81
– – slide collection. Anon. (Abs.) 81
per caput sugar consumption. (Stat.) 64
raw sugar price. (N.C.)..... 130
sugar balance 1968/69. (N.C.).... 34
– – 1969/70. (N.C.).....65, 163, 290
– market prospects. (N.C.)..... 33

INDEX

World: sugar production 1969/70.... 2, 31, 130, 161, 289, 319
and US raw sugar prices. (N.B.)..56, 182
see also International

Yeast: calcium and magnesium determination. J. R. Biart and H. Pérez. (Abs.)..... 377
cream drying. O. Argudín. (Abs.) 91
production. L. Delvaux. (Abs.).. 91
– from beet molasses. E. Bergander 185
– cane juice. P. R. Cantarelli and J. G. B. Caruso. (Abs.)..... 29
– – molasses. B. Revuz. (Abs.).. 121
Yeast: production from cane molasses, fermentative capacity. A. E. de Erézcano de P. *et al.* .. 379
– – – irradiation effects. H. Iizuka *et al.* (Abs.)..... 379
– distillery waste. O. Almazán.. 379
– – – K. Ichikawa *et al.* (Abs.).... 55
– molasses. Y. Akyüz. (Abs.).... 154
– – P. Birolaud. (Abs.)..... 154
– – and vinasse. J. Skiba and O. Ilnicka-Olejniczak. (Abs.).. 347
– sugar-methanol mixture. K. A. Aroj *et al.* (Abs.)..... 185
see also By-products *and* Micro-organisms
Yemen sugar factory plan. (Brev.).. 255
Yugoslavia: beet production 1968/69 32
– pulp dryer transport. (Brev.).. 318
sugar industry. H. Hirschmüller and H. J. Delavier. (Abs.)..... 212
– production 1969. (Brev.)..... 78

Zambia: Nakambala sugar factory. Anon. (Abs.)..... 147
Ndola refinery expansion. (Brev.).. 320
sugar expansion. (Brev.)..... 159
Zuckerwirtschaftliches Taschenbuch 1969. Anon. (N.B.) 56

NAMES

AALA, F. T. Cane varieties in Philippines. (Abs.) 109, 239
Descendants of N:Co 330 cane variety. (Abs.) 239
see also DIVINAGRACIA, N. S.
ABARCA, R. M. Exchange of cane seed and RODRÍGUEZ, H. Cane froghopper attack by fungus..... 335
ABBOTT, R. E. Sugar inversion. (Pat.) 317
ABDOU, M. A. F., *see* SCHNEIDER, F.
ABE, K., *see* MURAOKA, K.
ABE, M., *see* IWASHINA, S.
ABERDEE, J. E. C., *see* PATEL-KULKARNI, B. C.
A-B-R ATELIERS BELGES RÉUNIS. Bulk sugar silo. (Pat.)..... 59
ABRAHAM, J. G., *see* TÖDT, F.
ABRAMS, I. M. Decolorization with ion exchange resins. (Abs.)..... 281
ACOSTA, A. Bulk raw sugar handling in US. (Abs.)..... 211
AFANASIEV, M. M. and BALDRIDGE, D. E. Beet breeding for *Rhizoctonia* root rot resistance. (Abs.) .. 112
AGARWAL, J. K. P., *see* GUPTA, S. C.
AGARWAL, R. N. Indian sugar technology advances. (Abs.)..... 177
Massecuite apparent crystal volume 115
Pyrilla control. (Abs.) 240
AGARWAL, S. K. D. and AREN, P. K. Palm gur *vs.* cane gur. (Abs.).... 120
see also GUPTA, S. C. *and* SAXENA, S. L.
AGUADO, A., *see* ZÁVORKA, J.
AHLFELD, H. F. O. Licht's Internationales Zuckerwirtschaftliches Jahr- und Adressbuch 1969. (N.B.).... 26
AHMAD, H. and YUSUF, N. D. Cane varieties in Pakistan. (Abs.) 275
see also FASIHI, S.
AHMAD, S., *see* FASIHI, S. D.
AHUJA, J. S., *see* PAUL, B. B.
AITKEN, G., *see* REEDER, J. A.
AJINOMOTO CO. INC. Glutamic acid production. (Pat.)..... 156
AKINDINOV, I. N. Low-grade boiling Massecuite crystallization with precuring. (Abs.)..... 279
AKOPNIK, G. I., *see* POLYAK, M. L.
AKYÜZ, Y. Yeast from molasses. (Abs.) 154
ALBERINO, J. W. Everglades refinery 88
ALCALA, A. M., *see* GOMERI, J. R.
ALDOUS, M. W. and HITCHCOCK, J. C. Beet thinner. (Pat.)..... 59
ALEMÁN, G. Pan seeding. (Abs.).... 244
Sealed-downtake evaporator. (Abs.) 178
ALEXANDER, A. G. Cane sucrose chemical control. (Abs.) 335
Effect of 6-azauracil and nitrate on cane enzymes. (Abs.) 45
Effect of gibberellic acid on cane water and phosphorus utilization. and MONTALVO Z., R. Enzyme behaviour in desiccated cane. (Abs.) 367
ALLAN, G. N., *see* HOWES, A. M.
ALLEN, E. R. Sugar solution production 122
ALLEN, M. G. *et al.* Weed control with "Pyrazon"-"Propham" mixture.. 113
ALLISON, C. C., *see* BOYD, H. W.
ALMAZÁN, O. Yeast production from distillery waste. (Abs.)..... 379
ALVAREZ, M., *see* MIAGKOY, O.
AMAKO, K. and KIMURA, O. Raw sugar filtrability measurement. (Abs.).. 376
see also KUDO, S.
AMAND, H. *et al.* Triploid beet seed production. (Abs.)..... 18
AMANO, M. *et al.* Quick-dissolving sugar production. (Pat.)..... 186
AMERICAN FACTORS ASSOCIATES LTD. Centrifugal feed valve. (Pat.).. 125
see also SILVER, H. F.
AMERICAN SUGAR CO. Brown sugar production. (Pat.)..... 125
ANAND, M. Continuous massecuite cooling. (Abs.) 278
ANANIN, I. A., *see* GRYUNER, V. S.
ANANTHANARAYANA, K., *see* AVASTHY, P. N.
ANASTASAKOS, N., *see* ANCONA, A. J.
ANCHETA, T. R. Raw sugar quality in Philippines. (Abs.) 250
ANCONA, A. J. *et al.* Automatic pH and invert sugar measurement.. 215
ANDERS, H. Boiler feed water treatment. (Abs.)..... 54
ANDERSON, G. A. Humus from filter cake and protein. (Pat.)..... 157
ANDERSON, J. Weeds in Australia... 336
ANDO, T. *et al.* Non-sugars occlusion in sugar crystal. (Abs.) 376
– *see also* KAMODA, M.
ANIKEEV, Y. V., *see* ZAMBROVSKII, V. A.
APPEL, G. Maceration. (Abs.)..... 146
ARCENEAUX, J. G. Cane planter. (Pat.) 157
ARCHER, H. W., *see* SMITH, P. D.
ARCHIBALD, R. D. Vacuum clarification at Darnall. (Abs.)..... 84
AREN, P. K., *see* AGARWAL, S. K. D., GUPTA, S. C. *and* SHAH, K. A.
ARGUDÍN, O. Clarification with magnesium oxide. (Abs.) 114
Evaporator scale removal. (Abs.).. 339
Yeast cream drying. (Abs.)..... 91
and CABA, J. Juice filtration curve determination. (Abs.)..... 283
ARGÜELLES, R., *see* WONG, R.
ARIOSA M., J. R. Optimum massecuite exhaustion. (Abs.) 211
ARKHIPOVICH, N. A. and BARABANOV, M. I. Molasses formation. (Abs.) 153
and KUTSENKO, B. A. Refinery liquor ion exchange treatment .. 88
AROJ, K. A. *et al.* Yeast production from sugar-methanol mixture .. 185
ARTYUKHOV, Y. G. and GARYAZHA, V. T. Massecuite and sugar solution rheology. (Abs.)..... 89
ARVIER, A. C. Cane flowering control.. 45, 47
ASHDOWN, A. F. Hydraulic drives ... 339
ASPLUND, A. J. A. Bagasse pulp manufacture. (Pat.) 252
ASSALINI, G. Macroreticular ion exchange resins. (Abs.)..... 55
ATHAWALE, Y. K. Low-grade massecuite graining. (Abs.) 309
ATKINSON, J., *see* REEDER, J. A.
ATKINSON, R. Affination with methanol-acetone containing SO_2 248
AVASTHY, P. N. *et al.* Factors affecting cane borer attack. (Abs.) 13
AXINTE, I., *see* HERINEANU, I.
AYHAN, Y. Lime kiln operation. (Abs.) 118
AYLESWORTH, J. W., *see* BOLTON, E. F.
AZZI, G. M. *et al.* Weed trials in Brazil 45

BABEV, D. BMA and DDS beet diffusers. (Abs.)..... 279
BABIN, A. Syrup treatment in centrifuges. (Abs.)..... 372
BACCHUS, Z. and ELLIOT, E. Rum and alcohol distillery in Jamaica. (Abs.) 185
BADINAND, B. African sugar industries 177
BADIUZZAMAN, M., *see* DOULAH, M. S.
BAGSTER, D. F. Laboratory ion-exchange column scale-up 134
Refined sugar caking 263, 298
Sugar liquor decolorization with ion exchange resin 200
BAHADUR, J. P., *see* GUPTA, S. C.
BAHADUR, Y., *see* SESHADRI, V.
BAILEY METER CO., *see* ABBOTT, R. E.
BAILLET, V. J. Bagasse furnaces .. 20, 277
BAIRD, V. W. Beet agriculture in US 209
BAJAJ, J., *see* NATH, A.
BAJPAI, D. N., *see* GUPTA, S. C.
BALASHOVA, T. A., *see* KLOCHKOVA, T. A.
BALDRIDGE, D. E., *see* AFANASIEV, M. M.
BALLIGNAND, E. Beet harvester. (Pat.) 188
BALLINGER, D. K. Cane agriculture technical assistance programme in Philippines. (Abs.) 240
BALSA, J. J. Cane molasses purification and SERBIA, G. R. Cane molasses exhaustibility evaluation. (Abs.) 183
BANERJI, D. K., *see* KALRA, A. N.
BANGIS, V. B., *see* GALVEZ, A. M.
BARABANOV, M. I., *see* ARKHIPOVICH, N. A.
BARALDI, G. and FRANCIA, E. Beet drill trials. (Abs.)..... 307
– and VIROLI, G. Mechanical beet thinning. (Abs.)..... 276
BARAT, H. Cane pests and diseases in Africa. (Abs.)..... 17
BARNES, J. E. N:Co 310 flowering prevention tests. (Abs.) 46
BARNWELL, J. L., *see* SKOLE, R. D.
BAROWS, A. G. *et al.* Beet harvester elevator. (Pat.)..... 124
BARR, W. W., *see* HANZAS, P. C.
BARRATT, R., *see* HERITAGE, G.
BARRETT, H. E., *see* DICKINSON, B. N.
BARRINGHAM, R. Rat control in Australia. (Abs.)..... 47
BARTLETT, D. H. and JONES, R. A. Weed control with EPTC. (Abs.) 113
et al. Weed control with "Trifluralin" 112
BARTLETT, G. S. Cane mechanical harvesting in South Africa. (Abs.) 173
BARTSCH, J. Intramolecular hydrogen bridges in pyranose acetals. (Abs.) 345
Size of lime-colloid coagulates in raw juice. (Abs.)..... 310
BASSON, J. K. Radio-isotope applications in the sugar industry. (Abs.) 90
BATSTONE, D. B. and PRINCE, R. G. H. Evaporator simulation. (Abs.) .. 53
BATYREV, R. I., *see* ZOBNIN, P. V.
BAUM, J. J. Sugar factory equipment manufacture in Philippines. (Abs.) 210
BAUMERT, G. S. Refinery waste treatment. (Abs.)..... 375
BAUSERMAN, H. M. Beet pulp press.. 317
BAXTER, S. W. D. Preparation for mechanical cane harvesting. (Abs.) 207
FARBENFABRIK BAYER A.G. Herbicide 156
BAZHAL, I. G., *see* SIRENKO, S. I.
BEAUVISAGE, M. Self-setting cane mill 267
BEIERLE, G. D. Nematodes. (Abs.).. 82
BEISS, U. Beet lipids. (Abs.)..... 313
BELIEN, J. M., *see* DETROUX, L. *and* MARTENS, M.
BELOIT CORP. Beet pulp treatment for animal fodder. (Pat.)..... 220
see also KOELSCH, L. M.
BENDA, G. T. A. Cane mosaic. (Abs.) 368
"upright" cane. (Abs.) 81
BENNETT, M. C. Bone char physical properties. (Abs.)..... 215

INDEX

PAGE

BERGANDER, E. Yeast production from beet molasses. (Abs.) 185
BERGMANN, L. Synthetic felt sleeves for candle filter elements. (Abs.) 117
BERNADAC, B. Carbonatation. (Abs.) 245
BERNHARDT, W. O. and EIS, F. G. Carbonatation juice alkalinity control. (Abs.)..... 310
and MCGINNIS, R. A. Beet pulp heating rate in storage. (Abs.).. 118
BERSCH, J. W. Honiron "Hi-Extractor" 114
BETANCOURT, A. F. Cane dry-cleaning in Cuba. (Abs.)..... 114
BEUTLER, L. K., *see* FISCHER, B. B.
BEVAN, D. Sugar factory effluent treatment by aerator. (Abs.).... 53
and STEVENSON, J. C. Waste water BOD determination. (Abs.)..... 89
BHADAURIA, V. S., *see* MATHUR, B. K.
BHAGYALAKSHMI, K. V., *see* NAIDU, K. M.
BHANDARI, R. C. Juice purity rise in evaporation. (Abs.)..... 339
Reduced boiling house recovery calculation. (Abs.)..... 277
see also GUPTA, S. C.
BHARGAVE, K. S. *et al.* Cane mosaic host. (Abs.) 274
BHATIA, I. S., *see* JAISWAL, S. J.
BHATTI, D. S., *see* SANDHU, S. S.
BHIDE, V. S. Cane agriculture in India 16, 79
BIART, J. R. and PÉREZ, H. Calcium and magnesium determination in yeasts. (Abs.)..... 377
BICHSEL, S. E. and HOOVER, D. A. Beet juice ion exchange treatment 246
see also CARPENTER, T. D.
BILGEN, T. *et al.* Beet breeding for resistance to leaf spot. (Abs.).... 369
BINKLEY, W. W. Amino-acids in cane molasses browning polymers 5
see also REICHE, H. J.
BIRCHFIELD, W. Nematode control in Louisiana. (Abs.)..... 175
BIRD, R. J., *see* RUPPEL, E. G.
BIROLAUD, P. Yeast production from molasses. (Abs.) 154
BIZAU, V. Carbonatation mud lime recovery and re-utilization. (Abs.) 212
BLANKENBACH, W. W. and WILLISON, W. A. Beet flume water treatment and recirculation. (Abs.) 311
BLAUDE, J. Massecuite stirring in vacuum pans. (Abs.) 87
BOBROVNIK, L. D., *see* KOZYAVKIN, A. P., LITVAK, I. M., MISHCHUK, R. T. *and* VOLOSHANENKO, G. P.
BODE, H. E. Clarification with phosphated starch. (Pat.) 348
BOEGER, O. "Dorma" animal fodder 121
C. F. BOEHRINGER & SOEHNE GmbH, *see* LAUER, K.
BOGDANOV, S. A., *see* ZAGORUL'KO, A. Y.
BOGDANOVA, P. *et al.* Sugar factory muds as fertilizer and soil conditioner. (Abs.)..... 315
BOGDANOVA, P. S., *see* MICHEV, K. I.
BOHAČENKO, I., *see* BRETSCHNEIDER, R.
BOITEAU, R. *et al.* Mechanical harvesting in France. (Abs.) 143
BOLLENBACK, G. N., *see* HOYNAK, P. X.
BOLTON, E. F. and AYLESWORTH, J. W. Soil conditioning and beet yield.. 18
BONATI, C. R. Sucrose, beet and cane by-products utilization. (Abs.).. 29
BOND, R. M., *see* OAKES, A. J.
BONDARENKO, N. F. *et al.* Sangerhausen automatic centrifugal. (Abs.) .. 87
BONGIOVANNI, G. C. Beet leaf spot control. (Abs.) 307
BONNEMAISON, L. *et al. Atomaria* pest control. (Abs.)..... 50
BONNET, J. A. Cane sucrose biosynthesis. (Abs.)..... 335
BOREA, P. A., *see* TRABANELLI, G.
BORISENKO, N. N., *see* ZHMYRYA, L. P.
BORNSCHEUER, E. Beet breeding .. 176
BOSNJAK, M. Automatic evaporator level and Brix control..... 235
Sealed-downtake evaporators. (Abs.) 246
BOTIN, A. N., *see* KUKHARSKII, A. A.
BOUČEK, S. and VALTER, V. Weighers 373
BOURNE, B. A. Susceptibility of *Saccharum* spp. to cane mosaic.. 175
BOURZUTSCHKY, H. and MAUCH, W. Kestose formation and glucose and fructose determination. (Abs.).. 283
BOYCE, D. S. Cane land preparation.. 239
BOYCE, J. P. Cane spacing trials in South Africa. (Abs.)..... 48
see also THOMPSON, G. D.

PAGE

BOYD, H. W. and ALLISON, C. C. Pineapple disease inoculation tests on cane. (Abs.)..... 49
BOYLE, H. L., *see* STEWART, I. J.
BRADBURN, J. B., *see* DRUILHET, R. E.
BRADLEY, D., *see* REEDER, J. A.
BRANCHU, B., *see* BOITEAU, R.
BRAUNSCHWEIGISCHE MASCHINENBAUANSTALT. Bagasse pre-pressing after cane diffusion. (Pat.)..... 59
see also HABERICH, W., KAETHER, W. *and* VON DER LINDE, H. J.
BRAUNSTEINER, W. Beet juice phosphatation. (Abs.)..... 310
Effects of non-sugars on iron corrosion. (Abs.) 314
BRAY, N. P. Sugar-glucose-molasses in animal fodder. (Pat.) 59
BRAY, W. E. Chemical weed control in UK. (Abs.) 82
BREAUX, R. D. and DUNCKELMAN, P. H. Cane breeding in Louisiana 207
– Cane mosaic strains. (Abs.)..... 367
see also DUNCKELMAN, P. H.
BRENMAN, S. A. *et al.* Massecuite crystallization rates. (Abs.) 87
– Massecuite crystallization with hot air blowing. (Abs.) 181, 311
– Refinery massecuite reduction by sugar solution decolorization.. 88
BRETSCHNEIDER, R. and ČOPÍKOVÁ, J. Polysaccharide enzymatic hydrolysis. (Abs.) 215
et al. Beet juice colloidal matter determination. (Abs.) 119
– Foam prevention in beet juice and molasses solution. (Abs.)..... 86
– Raw juice storage. (Abs.) 376
C. BREWER & CO. LTD., *see* HART, C. W.
BRIESE, W. Clarification with flocculation aids. (Abs.)..... 180
BROEG, C. B. Codex Alimentarius Commission standards for sugars 184
BRONCKERS, F., *see* AMAND, H.
BRONNER, H. Beet seed planting density and germination. (Abs.) 113
BROUSSARD, V. P. Cane harvester .. 348
BROWN, I. A. and CHAMBERS, G. M. Cane flowering control. (Abs.).. 142
BRUBAKER, R. W., *see* HILLS, O. A.
BRUIJN, J. Enzymatic hydrolysis of polysaccharide in deteriorated cane and JENNINGS, R. P. Starch hydrolysis in cane juice. (Abs.)..... 84
BRÜNICHE-OLSEN, H. Beet and cane diffusion. (N.B.) 151
DDS cane diffuser. (Pat.) 220
Sugar industry in Denmark. (Abs.) 86
BUCHANAN, E. J. Cane diffuser stage efficiency calculation. (Abs.) 84
and JULLIENNE, L. M. S. A. Cane diffusion. 68, 99
BUCHANAN, J. G. Sucrose phosphate synthesis. (Abs.)..... 218
MASCHINENFABRIK BUCKAU R. WOLF AG. Bagasse press. (Pat.)..... 349
Centrifugal disc brake. (Pat.)..... 155
BUDAI, G. East German sugar industry 54
BUGAENKO, I. F. and TUET, L. B. Sucrose crystallization rate in molasses. (Abs.) 248
et al. Colorant fraction determination 282
see also MICHEV, K. I.
BUHL, F. C. *et al.* Clarification with flocculation aid. (Pat.)..... 317
BUKHTOYAROVA, S. A., *see* ZAKHAROV, K. P.
BULDA, V. A. Beet topping. (Abs.).. 213
BULGAKOVA, I. P., *see* BUGAENKO, I. F.
BULL, M. R. Morocco sugar industry 179
BULL, R. M. Cane grub in Queensland 366
BÜNNAGEL, R. and SPIEGELHALTER, F. Rotation dispersion of quartz plates 345
BURÉS, J. and FRIML, M. Liquor decolorization by carbonatation with chloride-of-lime. (Abs.) 281
BUŘIANEK, J. Determining optimum process factors in refining. (Abs.) 88
see also KADLEC, P.
BURLEIGH, C. H. Cane field land grading. (Abs.)..... 15
BURNS, R. N. and WULF, T. E. Beet topper. (Pat.) 124
BÜSCHING, L., *see* SCHIWECK, H.
BUTLER, B. P. Clarification with flocculation aids. (Abs.)..... 52
BÜTTNER WERKE AG. Beet pulp dryer 60
White sugar dryer-cooler. (Pat.) .. 155
BYFORD, W. Downy mildew control.. 242
BYSANTSON, W. N. Spheroidal graphite cast iron. (Abs.) 84

PAGE

CABA, J., *see* ARGUDÍN, O.
CABRER, A., *see* RODRÍGUEZ, R.
CAHEN, J. P. and GIGLIO, A. Beet juice treatment with active carbon 373
CALEIRO, R. *et al.* Cane field labour in Puerto Rico. (Abs.)..... 17
CALLAHAN, J. W. Scale removal. (Pat.) 186
CALLIHAN, C. D., *see* DUNLAP, C. E.
CAMPBELL, R. G. and OLDENBURG, C. C. Sugar phosphates production by electrodialysis. (Pat.)..... 316
et al. Sucrose ester production. (Pat.) 123
CAMURUNGAN, R. G. Molasses exhaustion. (Abs.)..... 244
CANCIENNE, P. E. Continuous massecuite crystallization. (Abs.)....177, 277
CANTARELLI, P. R. and CARUSO, J. G. B. Yeast fermentation from cane juice. (Abs.) 29
CARPENTER, F. G., *see* FARBER, L.
CARPENTER, T. D. and BICHSEL, S. E. Ash determination in beet juice, molasses and white sugar. (Abs.) 345
CARRENO, P. A., *see* KIRSTEIN, A.
CARRERAS, F. Mechanical harvesting trials in Puerto Rico. (Abs.).... 208
CARUSO, J. G. B., *see* CANTARELLI, P. R.
CARVER, N. E. and SILVER, J. M. Beet sample cleaner. (Pat.)..... 124
see also SCHMALZ, C. L.
CARY, J. W., *see* KOHL, R. A. *and* MAYLAND, H. F.
CASEY, J. A. Evaporator scale prevention. (Pat.)..... 348
Lime salts reduction with surface-active agents. (Abs.) 85, 210
CASSELLA FARBWERKE MAINKUR AG. Sugar esters production. (Pat.).. 380
CASSELMAN, T. W. and LE GRAND, F. Cane ratoon stool lifting and transplanting. (Abs.) 15
CASTRO, F. J. Cane stalk holder and hand protector. (Pat.)..... 316
CASTRO, V. G. *et al.* Cane planting depth and germination. (Abs.)..... 79
CAYERE, A., *see* SAMUELS, G.
ČEJKOVÁ, V., *see* ČÍŽ, K.
CENCI, P. and CREMONINI, B. Organotin pesticide analysis. (Abs.).... 377
ČERNÝ, S., *see* SMÍŠEK, M.
CERRIZUELA, E. A. Chemical weed control in Argentina. (Abs.)..... 207
CHAKRAVARTY, B. and SINGH, S. Cane molasses purity in India. (Abs.).. 120
CHAMBERS, G. M. Chemical weed control. (Abs.) 45
Weed and cane flowering control.. 173
see also BROWN, I. A.
CHAMBON, L. J. Tablet/cube sugar press 123
CHANDRA, R., *see* SHUKLA, J. P.
CHANSARKAR, G. D. Sulphur burner air flow measurement. (Abs.).... 145
CHAO, M. C. Bagasse board heat treatment. (Abs.)..... 91
CHAPMAN, F. M. Affination. (Abs.) .. 181
Boiling 76, 103, 375
Sugar recovery and molasses exhaustion in refining..... 7
CHAPMAN, L. S. Chemical weed control in Australia. (Abs.)..... 47
Habana oat grass control in Australia. (Abs.)..... 141
CHARLES, D. F. Starch determination in raw sugar. (Abs.)..... 216
CHARPENTIER, L. J. *et al.* Cane borer infestation in Louisiana. (Abs.).. 17
CHARTIER, J. C., *see* DEVILLERS, P.
CHARYKOV, N. F., *see* VYAZNIKOV, A.K.
CHATTERJEE, A. C. Defeco-melt crystallization. (Abs.)..... 278
Undetermined losses. (Abs.)..... 146
et al. Clarification with flocculation aid. (Abs.)..... 278
– Clarification with superphosphate 278
CHATTOPADHYAY, S. K. Factory equipment corrosion prevention. (Abs.) 115, 308
CHAUDURY, R. R. Irrigation in India 15
CHAUFFE, H. J. Cane harvester. (Pat.) 186
CHAUX, D. M. Cane milling. (Abs.).. 53
CHAWLA, R. P., *see* SHARMA, J. M.
CHECHEL', N. S., *see* KHODURSKII, E. A.
CHEN, J. C. P. Raw sugar refining quality. (Abs.)..... 178
CHEN, R. S. and TSE, C. C. Effects of cane planting time and density on yield. (Abs.) 46
CHERNIKOVA, I. P. Betaine and glutamic acid production from beet molasses. (Abs.)..... 185
CHERNYSH, N. A., *see* NOVIKOV, V. A.

INDEX

CHERPAKOV, V. P., *see* ZUBCHENKO, A. V.
CHETTY, G. K. Coarse grooving of cane mill rollers. (Abs.) 20
CHIEN, M. M., *see* KUO, T. T.
CHIKIN, G. A. and TYULENEVA, G. N. Ion exchange resin working cycle calculation. (Abs.) 248
et al. Ion exchange resin damage by syrup decolorization. (Abs.) 217
see also IVANOV, S. Z.
CHILTON, S. J. P. and STEIB, R. J. Louisiana cane varietal situation 15
CHIN, N. J. Overhead irrigation in Jamaica. (Abs.) 140
CHINLOY, T. and HOGG, B. M. Cane rotation with Pongola grass in Jamaica. (Abs.) 140
CHIU, C. S. L. "Canex UK" bagasse particle board. (Abs.) 91
S. A. DE FONDERIES ET ATELIERS L. CHOQUENET. Beet slicer. (Pat.) .. 93
CHOU, J. C. Molasses viscosity and exhaustion. (Abs.) 20
CHOUDBURY, P., *see* CALEIRO, R.
CHU, T. and SERAPION, J. L. Weather and cane flowering. (Abs.) 367
CHUA, R. Y. Monosodium glutamate production from cane molasses .. 315
CHUPAK, I. S. and ROZENTAL', L. A. Sugar packaging, bulk storage and transport in USSR. (Abs.) 87
Čížek, K. Refinery liquor ion exchange decolorization. (Abs.) 343
and ČEJKOVÁ, V. Beet juice electrodialysis. (Abs.) 212
CLAPAROLS, E. L. Philippine sacadas 17
CLAPPERTON, J. F. and MACWILLIAM, I. C. Sugars location on paper chromatograms by dipping reagents. (Abs.) 346
CLARK G., J. A. and GARCÍA L., F. Three-massecuite boiling schemes 339
CLARKE, S. G. Cane mill gears. (Abs.) 52
CLASON, W. E. Dictionary of chemical engineering. (N.B.) 25
CLAYTON, J. E. Cane harvesters. (Abs.) 110
and WHITTEMORE, H. D. Harvesting recumbent cane. (Abs.) 110
CLONINGER, C. K. and CORRADINI, F. T. Inversion reduction by bactericide 277
COE, G. E. Beet leaf spot control trials 83
COLEMAN, J. M. Continuous *vs.* batch centrifugals. (Abs.) 150
COLES, E. D. Soil drainage planning .. 49
COLLETTI, J. J. Cane planter. (Pat.) .. 188
COLONIAL SUGAR REFINING CO. LTD. Gum production from dextran .. 60
Sugar phosphates recovery. (Pat.) .. 220
see also CAMPBELL, R. G., CURTIN, J. H., GAGOLSKI, J. *and* SMYTHE, B.
COMMERCIAL SOLVENTS CORP., *see* HARNED, R. L.
COOPER, R. C., *see* TSUGITA, R. A.
COPÍKOVÁ, J., *see* BRETSCHNEIDER, R.
CORDINER, J. B. *et al.* Heat transfer in laboratory evaporator. (Abs.) 90
CORDOVEZ, F. La Pastora sugar factory 146
CORNEJO, S. R. Effect of herbicides on borer egg parasite. (Abs.) 273
CORNET, C., *see* DEVILLERS, P.
CORRADINI, F. T., *see* CLONINGER, C. K.
CORTESSI, H. A. Beet male sterility .. 19
COSTILLA, M. A. Nematodes. (Abs.) 306
COTNER, J. A. Stainless steel *vs.* copper tubes. (Abs.) 146
COVARELLI, G. Chemical weed control in Italy. (Abs.) 19
Nitrogen fertilizer trials. (Abs.) .. 83
COVAS, T. Cane washing at Luabo .. 84
CRAWFORD, W. R. Cane milling .. 291, 327, 359
Swing-hammer shredder mechanics 53
CREIGHTON, S. M., *see* MILLER, R. B.
CREMONINI, B., *see* CENCI, P.
CRUZ, R. A. Cane molasses by-products 315
CUEL, J. Liming control. (Abs.) 374
CULP, E. J. Raw sugar quality standards. (Abs.) 216
CUNHA DA SILVEIRA, J. Areado sugar manufacture. (Abs.) 150
CUNNEEN, E. W. P., *see* EDWARDS, R. E.
CURIS, M., *see* DEVILLERS, P.
CURTIN, J. H. and GAGOLSKI, J. Sucrose ester production. (Pat.) 123
CURTIS, G. J. Beet male sterility transmission. (Abs.) 19
CURWEN, H. A. Stainless steel application and corrosion. (Abs.) 370
CZIRFUSZ, M. Filter-thickeners for beet juice treatment. (Abs.) 212
Mechanical lime kiln charging. (Abs.) 371

DAELLENBACH, F. O. Beet thinner .. 157
DALIPE, E. T., *see* GALEON, M. R.
DAMBRINE, F. Cane diffuser. (Pat.) .. 124
et al. Fives Lille-Cail continuous vacuum pan. (Abs.) 181
DAMBROTH, M. Beet thinning. (Abs.) 369
Storage of washed beet. (Abs.) 372
DANDÁR, A. *et al.* Beet rasp. (Abs.) .. 152
see also SMELÍK, A. *and* VAŠÁTKO, J.
DANIELS, J., *see* PRICE, S. *and* STEVENSON, N. D.
DAN'KO, A. V. and KOSTENYUK, A. M. Sugar dust explosions. (Abs.) .. 212, 247
A/S DE DANSKE SUKKERFABRIKKER. Cane diffusion. (Abs.) 244
Filter. (Pat.) 348
see also BRÜNICHE-OLSEN, H. A.
DARPOUX, H. *et al.* Beet leaf spot control. (Abs.) 50
DAS, R. K., *see* SATPATHY, J. M.
DATSENKO, N. M. *et al.* Beet water separators. (Abs.) 213
DAVID, H., *see* KALRA, A. N.
DÁVID, J. Massecuite washing in centrifugals. (Abs.) 87
DAVID P., E. Fusel oil from cane molasses. (Abs.) 284
DAVID-RECUENCO, J. Nematode control. (Abs.) 240
DAVIES, J. G. Clarification. (N.B.) .. 151
DAVIES, W. N. L. Chemical weed control. (Abs.) 45
DAVIS, J. F., *see* GASCHO, G. J.
DAVYDOV, A. I., *see* VYAZNIKOV, A. K.
DE, A. K. Helical gears. (Abs.) 115
DE AZEVEDO P., M. Cane worker instruction in Brazil. (Abs.) 367
DE BROGLIO, A. and HULETT, J. R. High-test molasses manufacture .. 154
DE CARO, J. C., *see* DE ERÉZCANO DE P., A. E.
DE CREMOUX, J. Automatic boiling control. (Abs.) 280
Vacuum and vapour flow in horizontal vacuum pans. (Abs.) 245
DEERE & CO. Beet thinner. (Pat.) .. 125
DE ERÉZCANO DE P., A. E. *et al.* Alcohol production from cane molasses .. 379
DEFIBRATOR AB, *see* REINHALL, R. B.
DEGRAND, M. F., *see* DEVILLERS, P.
DE JONGE, J. Beet cleaner. (Pat.) 380
DE LA CRUZ, Z. V. Philippines sacadas 15
DE LA MOTTE, A. Steel tube corrosion 371
DE LA TORRE, R. Automatic level and Brix control in evaporator. (Abs.) 150
DE LA TULLAYE, B., *see* DARPOUX, H.
DELAVIER, H. J. Drying and cooling in the sugar industry. (N.B.) 26
and HIRSCHMÜLLER, H. Ghana sugar industry. (Abs.) 277
– Indonesia sugar industry. (Abs.) 210
– Israel sugar industry. (Abs.) 374
– Tanzania sugar industry. (Abs.) 146
see also HIRSCHMÜLLER, H.
DELGADO F., F. Cane agriculture in US and Bahamas. (Abs.) 239
Mechanical harvesting trials in Puerto Rico. (Abs.) 208
et al. Mechanical cane harvesting in Puerto Rico. (Abs.) 335
DE LOS ANGELES M., M., *see* KARAMURZA, S.
DELVAUX, L. Yeast production. (Abs.) 91
DE MARBAIX, M. *et al.* Automatic boiling control. (Abs.) 214
DENIZOT, J. P., *see* LABY, H.
DENNY, R. I. and JAMES, G. P. ATV clarifier performance comparison 52
DENTON, R. S., *see* PAINTER, H. A.
DE OLIVEIRA, E. R. Cane sugar yield calculation. (Abs.) 28
DE OLIVEIRA, H. and OMETTO, J. C. Chemical weed control. (Abs.) .. 273
DESHPANDE, P. S. and PERUR, N. G. Beet varietal trials in India. (Abs.) 369
DESHPANDE, S. B., *see* RUIKAR, S. K.
DETROIT FLAME HARDENING CO., *see* SCOTT, M. R.
DETROUX, L. and BELIEN, J. M. Chemical weed control. (Abs.) .. 144
et al. Chemical weed control. (Abs.) 176
DE ULLIVARRI, R. F. and KENNING V., G. Cane varieties in Argentina .. 275
DEVILLERS, P. Losses in stored beet 180
and CORNET, C. Vacuum pans. (Abs.) 373
and LOILIER, M. Beet juice ion exchange treatment. (Abs.) 180
and TOURLIÈRE, S. Beet sampling .. 117
et al. Carbonatation. (Abs.) 372
– Evaporator tube corrosion. (Abs.) 245
– Sugar colour measurement. (Abs.) 283
– Waste water treatment. (Abs.) .. 86, 371
DEXTER, S. T. *et al.* Calcium diphosphate feed from carbonatation mud 154
DHANUKA, P. L. Bihar sugar industry 174
DHINGRA, D. R., *see* SAINI, S. S.
DÍAZ L., L. D. Cane milling and juice bagasse fines. (Abs.) 243
DICKINSON, B. N. and BARRETT, H. E. Colour removal with resin-carbon-adsorbent mixtures. (Abs.) 281
DIDKOVSKAYA, L. M. Centrifugal drive control. (Abs.) 246
DIETZEL, W., *see* KAETHER, W.
DIOKNO, A. By-products from cane juice. (Abs.) 315
DIVERSEY LTD. Disinfection of juice extraction equipment. (Pat.) 93
DIVINAGRACIA, N. S. *et al.* Cane varietal trials in Philippines. (Abs.) 239
DIXIT, R. K., *see* GUPTA, S. C. *and* VARMA, N. C.
DIWAN, V. D. Boiling instrumentation 309
DMITRASH, V. V., *see* TOBILEVICH, N. Y.
DNEPROPETROVSKY ZAVOD SELSKOKHOZAISTVENNOGO MASHINOSTROENIA. Beet harvester. (Pat.) 219
DOBROTVORTSEVA, A. V. Beet spacing trials in USSR. (Abs.) 50
DOBROVOL'SKAYA, L. N. *et al.* Beet juice ion exchange treatment and thermal stability. (Abs.) 148
see also KOLESNIKOV, V. A.
DOBRZYCKI, J., *see* ZAGRODZKI, S.
DOLINEK, A. Fives Lille-Cail continuous vacuum pan. (Abs.) 118
DOMSA, F. Carbonatation vessel. (Abs.) 245
see also IONESCU, T.
DONNAT, J. Active carbon 342
DÖRSCH, K., *see* DE MARBAIX, M.
DOTSENKO, L. D., *see* GOLUBEVA, A. D.
DOTSENKO, N. N., *see* PODGAETS, S. I.
DOTZENKO, A. D. and OZKAN, M. Chemical weed control. (Abs.) .. 83
– *et al.* Weed seed density in beet fields 144
DOULAH, M. S. and BADIUZZAMAN, M. Aconitic acid recovery from molasses. (Abs.) 347
DOWLING, J. F., *see* REICHE, H. J.
DRAYCOTT, A. P. and DURRANT, M. J. Magnesium fertilizer tests in UK. 143, 144
DRILLER, K. T. Cane harvester. (Pat.) 348
DROZDOWSKI, T., *see* RUCIŃSKI, L.
DRUILHET, R. E. *et al.* Bagasse fibre biodegradation. (Abs.) 154, 379
DUCASSE, J. C. V. Cane disintegrator 381
DUFF, J. H. Filter sweetening-off .. 122
DUFFUS, J. E. Beet winter yellows virus. (Abs.) 307
DUMIS, M. Spiral heat exchangers .. 280
DUNAEVA, K. N., *see* SAPRONOV, A. R.
DUNCKELMAN, P. H. and BREAUX, R. D. Cane breeding in US. (Abs.) 140
– Cane hybridization with wild cane in US. 43
– Mosaic-resistant wild clones. (Abs.) 275
see also BREAUX, R. D.
DUNLAP, C. E. and CALLIHAN, C. D. Protein production from bagasse 218
DUNNING, R. A., *see* JONES, F. G. W.
E. I. DU PONT DE NEMOURS & CO. Cane growth regulators. (Pat.) 125, 219
DUPONT DE R. DE ST. ANTOINE, J. Cane pol calculation. (Abs.) 152
Mauritius sugar factory performances. (Abs.) 147
and VIGNES, E. C. Molasses exhaustibility calculation. (Abs.) .. 153
DURRANT, M. J., *see* DRAYCOTT, A. P.
DURRELL, S. R. Heat exchanger tube flaw measurement. (Abs.) 21
DU TOIT, J. L. and MURDOCH, M. G. Cane agriculture in South Africa 48
DUTTON, J. V., *see* OLDFIELD, J. F. T.
DVORNICHENKO, M. V., *see* KRAVETS, Y. O.
DYAL, R., *see* GUPTA, K. M.
DYMOND, K. Cane agriculture on Natal farm. (Abs.) 49

INDEX

PAGE

EASTON, B. E. Beet agriculture prospects in US. (Abs.) 82
EBATA, M. Sugar distribution in beet 346
EDELMAN, J. Sucrose formation in green plants. (Abs.) 205
EDWARDS, C. J. Weed control with "Phenmedipham". (Abs.) 112
EDWARDS, L. S. Cane railway ballast tamping. (Abs.) 53
EDWARDS, R. E. Sugar dust explosion variables. (Abs.) 181
and CUNNEEN, E. W. P. Dust explosion hazard in refinery. (Abs.) 150
EGAN, B. T. Cane leaf scald strains .. 241
Cane ratoon stunting control. (Abs.) 336
Cane red rot in Australia. (Abs.) .. 47
Losses in stored cane. (Abs.) 205
Stored cane micro-organisms. (Abs.) 142
Testing for cane leaf scald resistance 142
Tetracyclines and cane chlorotic streak. (Abs.) 81
EGASHIRA, Y., *see* IWASHINA, S.
EGOROV, V. P., *see* VYAZNIKOV, A. K.
EIS, F. G., *see* BERNHARDT, W. O., HALDEN, H. E. *and* MCGAGIN, T. A.
EKAMBARAM, C. Cane internode formation. (Abs.) 14
EKERN, P. C. Cane water consumption 110
ELAGIN, A. M. and GELUNOV, A. E. Forced ventilation of stored beet 22
ELIAS, A. *et al.* Cane molasses as animal fodder. (Abs.) 92
see also MARTIN, J. L. *and* PRESTON, T. R.
ELLIOT, E., *see* BACCHUS, Z.
ELMER, J. *et al.* Beet juice ion exchange treatment. (Abs.) 214
EMEL'YANOV, N. A. *et al.* Beet conveyor. (Abs.) 55
EMMERICH, A., *see* ROSENHAUER, K. *and* SCHNEIDER, F.
ERDMANN, E. R. Hopper weighers .. 23
ESCOBER, J. T. and LOPEZ, M. E. Cane seed pieces irradiation. (Abs.) 240
ESLEYER, P. Typhoons in Philippines 109
ESPADIN H., J. A., *see* MARIOTTI, J. A.

FABCON INC. Evaporator scale reduction with surface-active agent 380
Surface-active agent for massecuite treatment. (Pat.) 125
FAIRCHILD, W. D. Puna sugar factory equipment. (Abs.) 370
FAIRHURST, G. S. and MAYLOTT, A. Falling-film evaporator. (Abs.) .. 248
FARBER, L. *et al.* Colorants in refinery products. (Abs.) 216
– Colorants separation from raw sugar and refinery products .. 376
FARMER, J. Cane juice extraction .. 122
FASIHI, S. and AHMAD, H. Cane varietal performances in water-logged and saline soil. (Abs.) 273
and AHMAD, S. Cane seed setting for breeding in Pakistan. (Abs.) 141
FEDOROVSKII, V. A., *see* SIBIRTSEV, V. G.
FEIER, U., *see* MAUCH, W.
FEKETE, L. and ZAMECSNIK, L. Beet pile forced ventilation along flumes 371
FEKETE, P., *see* HAVRÁNEK, A.
FELBER, E. H. G. Effect of ion exchange treatment on boiling efficiency. (Abs.) 179
see also HABERICH, W.
FERNANDES, J., *see* AZZI, G. M.
FERNÁNDEZ B., J. and MARINELLO M., J. Sucrose determination with borax. (Abs.) 89
FEWKES, D. W. Cane growth regulators 205
see also VLITOS, A. J.
FIFE, J. M. Amino-acids and beet yellows infection. (Abs.) 276
FINKNER, R. E., *see* MALM, N. R.
FINSKII, E. S. Beet diffuser lubrication and temperature control. (Abs.) 149
FISCHER, B. B. and BEUTLER, L. K. Chemical weed control in California 144
FISK, F. W. and PÉREZ, R. P. Cane borer flight activity in Puerto Rico 45
SOC. FIVES LILLE-CAIL, *see* DAMBRINE, F.
FLAVELL, W. and REDFEARN, G. L. Sucrose incorporation in melamine resins. (Abs.) 218

PAGE

FLETCHER & STEWART LTD. Vacuum pan. (Pat.) 380
FLORES C., S. Cane pests and diseases in Mexico. (Abs.) 111
FOGG, R. A. and MEGGITT, W. F. Chemical weed control in Canada. 82
and NIEDERER, J. J. Beet harvester maintenance. (Abs.) 18
see also GASCHO, G. J.
FOMINYKH, A. M. Hydrocyclone treatment of fresh and waste water .. 149
water. (Abs.) 149
FORSTER, G. Iron determination in beet juice. (Abs.) 313
FOSTER, D. H. Cane deterioration after harvesting. (Abs.) 21, 141
FOX, R. L. *et al.* Cane silicon content 273
FRAKES, M. G., *see* DEXTER, S. T. *and* GASCHO, G. J.
FRANCIA, E., *see* BARALDI, G.
FRANCIS, D. W., *see* HOWES, A. M.
FREEMAN, K. C. Effect of row spacing on cane yield. (Abs.) 79
FRENCH OIL MILL MACHINERY CO. Bagasse pressing. (Pat.) 60
FRERS, H., *see* HESCH, R.
FRESHWATER, I. T. Cane varieties in Australia. (Abs.) 142
Cane weighing. (Abs.) 47
Q 85 ratooning trials. (Abs.) 16
FREUND, P. Effect of beet sugar content and raw juice purity on factory heat economy. (Abs.) 117
Eliminating steam consumption fluctuation. (Abs.) 340
Evaporator steam requirement calculation. (Abs.) 374
FRIML, M. Raw sugar and white sugar quality evaluation. (Abs.) 217
and TONINGER, K. Beet tarehouse process and equipment. (Abs.) .. 27
see also BUREŠ, J.
FROST, H. Clarifier mud filtration .. 211
FU, H. C. *et al.* Plastic mulch for cane sett growth. (Abs.) 204

GADDIE, R., *see* JORGENSEN, J. D.
GAGOLSKI, J. and SMYTHE, B. M. Animal fodder containing sucrose phosphate salt. (Pat.) 220
see also CURTIN, J. H.
GALEON, M. R. and DALIPE, E. T. Automatic cane carrier control .. 210
GALLARATE, A. G. Beet diseases, pests and weed control. (Abs.) 337
GAL'PERIN, A. S. Evaporator scale reduction. (Abs.) 86
and IBRAGIMOV, M. T. Kirgiz sugar factories. (Abs.) 55
GALVEZ, A. M. *et al.* Cane varietal trials in Philippines. (Abs.) 240
GARCÍA G., J. A., *see* PLASENCIA G., F.
GARCÍA L., F., *see* CLARK G., J. A.
GARYAZHA, V. T., *see* ARTYUKHOV, Y. G.
GASCHO, G. J. *et al.* Effects of potassium and nitrogen on beet. (Abs.) 276
GAŠIĆ, O., *see* STEGANOVIĆ, D.
GASKILL, J. O. Beet breeding for *Rhizoctonia* root rot resistance .. 112
Beet root selection. (Abs.) 144
see also BILGEN, T.
GAVANDE, S. A and GONZALEZ, M. A. Irrigation in Costa Rica. (Abs.) 305
see also GONZALEZ, M. A.
GAWRYCH, M. Icing sugar production standards. (Abs.) 54
GAWRYCH, S. *et al.* DDS beet diffusion 212
GAYOL, J. Active carbon from bagasse 379
GEGO, A., *see* GUGENHAN, H.
GEIGER, H. U., *see* SCHNEIDER, F.
GELEN, H. Carbonatation. (Abs.) .. 54, 374
Entrainment separator washing .. 23
Olier beet diffuser operation and press water utilization. (Abs.) .. 118
GELUNOV, A. E., *see* ELAGIN, A. M.
GENIE, G. V. Cossette thickness and beet diffusion. (Abs.) 340
GENOTELLE, J. and MICHEL, R. Automatic control equipment and processes. (Abs.) 214
GERASIMENKO, A. A. and SHAPOSHNIKOVA, Z. B. Sucrose crystallization in green syrup. (Abs.) 217
– Sugar solution and syrup viscosity and density. (Abs.) 183
et al. Trace elements in white and refined sugar. (Abs.) 282

PAGE

GERHARDT, W. Sucrose-N-alkylsulphonyl urethanes. (Abs.) 92
GIBE, J. N. and LEDESMA, F. I. Cane varieties in Philippines. (Abs.) .. 240
and PANOL, F. Y. Cane breeding in Philippines (Abs.) 240
GIBE, L. N. Cane milling with surface-active agent. (Abs.) 244
GIBSON, W. O. Irrigation water flow control. (Pat.) 188
GIERSCHNER, K., *see* MAUCH, W.
GIGLIO, A., *see* CAHEN, J. P.
GILFILLAN, E. C. Herbicide boom sprayer. (Abs.) 49
GILL, P. S. Beet growing in India .. 276
Cane intercropping in India. (Abs.) 175
Urea *vs.* ammonium sulphate as fertilizer. (Abs.) 14
see also PANJE, R. R.
GILLASPIE, A. G. Cane varietal susceptibility to maize dwarf mosaic 80
GIORGI, J. C., *see* DAMBRINE, F.
GLEIZER, I. F. and KHASILEV, E. S. Disc filters for beet juice treatment 149
GLORIA, M. F. Bagasse board production and properties. (Abs.) .. 315
GLOVER, J. Cane root behaviour. (Abs.) 48
GLYGALO, E. M., *see* KOT, Y. D.
GÖBELEZ, M. Beet leaf spot control in Turkey. (Abs.) 83
GÖÇMENÇELEBI, T. Alcohol from beet molasses. (Abs.) 154
GODBOLE, M. G. *et al.* Cane carrier stoppage recorder. (Abs.) 115
GOLDEN, L. E. Aerial and ground application of nitrogen. (Abs.) 81
GOLOVNYAK, Y. D., *see* KARTASHOV, A. K. *and* KRAVETS, Y. O.
GOLUBENKOV, V. N., *see* SHEVTSOV, D. S.
GOLUBEV, V. N., *see* KISELEV, A. N.
GOLUBEVA, A. D. *et al.* Effects of soluble N compounds on beet juice and molasses. (Abs.) 377
– Low-grade beet processing. (Abs.) 246
GOLUEKE, C. G., *see* ICHIKAWA, K. *and* TSUGITA, R. A.
GOMERI, J. R. and ALCALA, A. M. Massecuite surface-actve additive effects. (Abs.) 244
GÓMEZ, J. J. Juice Brix, pol and purity relationships in cane milling. (Abs.) 183
GOMPERT, D. H. Beet thinner. (Pat.) 188
GONCALVES, M. L. Rosy mealybug in Mozambique. (Abs.) 80
GONZALEZ, M. A. and GAVANDE, S. A. Costa Rica cane soils. (Abs.) 305
see also GAVANDE, S. A.
GONZÁLEZ G., A. Cane agriculture and varieties in Mexico. (Abs.) 111
Climatic effect on cane sucrose content. (Abs.) 14
GONZÁLEZ M., J. C. Non-sugars and molasses formation. (Abs.) 217, 309
GOODMAN, A. E. and MCCREADY, R. M. Beet osmolality and sucrose content. (Abs.) 89
GORBATYUK, V. I. Carbonatation mud sweetening-off (Abs.) 311
GORDIENKO, A. P., *see* TOBILEVICH, N. Y.
GORSI, A. M. and YUSUF, N. D. Cane seed rate and germination. (Abs.) 275
GOSTAŃSKA, B. Beet processing in January. (Abs.) 214
GOULETTE, M., *see* LABY, H.
GRAF, A. Beet storage with forced ventilation. (Abs.) 310
GRANDADAM, A. R. "Evaporation crystallizer" boiling. (Abs.) 279
Vacuum pans with constant massecuite level. (Abs.) 341
GRASMANN, W. and PARISEK, O. Beet juice flow and Brix measurement and control. (Abs.) 148
GRAUGNARD, E. H. Multi-row cane equipment. (Abs.) 15
GREBENYUK, S. M. *et al.* Beet cossette shape and extraction. (Abs.) 280
GREENAWAY, S. Cane pests control in Australia. (Abs.) 47
GRIPPEN, T. J. Fuel gas for welding 85
GRIVTSEVA, E. A. *et al.* Betaine, glutamic acid and nitrogen in beet molasses. (Abs.) 153
see also GERASIMENKO, A. A.
GROSZKOWSKI, Z., *see* SOLTYSIAK, J.
GRYUNER, V. S. *et al.* White sugar packaging. (Abs.) 343
GUAGLIUMI, P. Froghopper control in Brazil. (Abs.) 141, 367

INDEX

PAGE

GUERRIER, P. Massecuite exhaustion 373
GUGENHAN, H. and GEGO, A. Beet thinner. (Pat.) 187
GUINART, V. Effect of cane milling on bagasse pulp yield and quality.. 347
GULMINELLI, L. Beet molasses ion exchange treatment. (Abs.) 55
GULYI, I. S., *see* SIRENKO, S. I.
GUPTA, A. P. and NARAIN, M. Raw sugar caking. (Abs.) 278
et al. Cane deterioration in storage 111
see also GUPTA, S. C.
GUPTA, K. K., *see* GUPTA, S. C.
GUPTA, K. M. *et al.* Cane white grub control. (Abs.) 46
GUPTA, N. S., *see* RAO, S. N. G.
GUPTA, S. C. Processing juice from Co 1148 cane. (Abs.) 116
and AGARWAL, S. K. D. Seed slurry preparation. (Abs.) 20
and GUPTA, A. P. Cane leaf hopper damage in India. (Abs.) 175
et al. Beet sugar manufacture in India. (Abs.) 117
– Cane juice deaeration. (Abs.).. 145, 177
– "Flocal TN 40" flocculation aid.. 116
– Milk-of-lime treatment by hydrocyclone. (Abs.) 145
– Potassium salts recovery from distillery waste. (Abs.) 185
– *Strychnos potatorum* seeds as flocculation aid. (Abs.) 145
– Syrup decolorization by ion exchange. (Abs.) 116
see also RANA, O. S. *and* SINGH, R.
GUPTE, S. G. Low-grade boiling. (Abs.) 309
GÜRAY, P. Juice recycling to prelimin Limestone consumption in Turkey.. 54 246
GURUMURTHY, B. S., *see* OOMMEN, T. T.
GUTHRIE, A. M. and PILCHER, J. R. Belt conveyors for sugar. (Abs.) 84
GUTSTEIN, Y. and ZUR, M. Beet leaf spot control. (Abs.) 144
GYURKO, P. Bacterial formation in beet seedling rhizosphere. (Abs.) 51

HAAS, G. E. Rodent-flea correlations 110
HABERICH, W. and FELBER, E. H. G. Beet juice ion exchange treatment 187
see also VON DER LINDE, H. J.
HABESHAW, D. Effect of light on sucrose translocation in beet .. 51
HADJIANTONIOU, D., *see* SCHNEIDER, F.
HAHN, E. M. Cane handling system.. 339
HAIN, A. M. Sugar factory equipment manufacture in Philippines. (Abs.) 210
HÁJEK, L. Spray irrigation and fertilizer effect on beet. (Abs.) 51
HALDEN, H. E. *et al.* Vacuum pan scale prevention. (Abs.) 246
HALE, D. J. and WHAYMAN, E. Multitray subsiders. (Abs.) 52
HALES, G. R., *see* LOTT, L. R.
HAM, G. J. Cane water requirements 305
HANÁKOVÁ, L., *see* BRETSCHNEIDER, R.
HANBURY, L. F. Effect of seed rate on mechanical beet thinning. (Abs.) 50
HANGYÁL, K. Waste water treatment at Selyp. (Abs.) 54
Water economy and waste water treatment in Hungarian sugar factories. (Abs.) 340
White sugar refining. (Abs.) 251, 375
and WÖLLER, L. Raffinose determination in beet molasses. (Abs.) 377
et al. Dunajská Streda factory... 371
HANNA, A. D. Cane diseases. (Abs.) 80
HANZAS, P. C. and BARR, W. W. Saponin determination in white sugar. (Abs.) 378
see also TENG, J. I.
HARDING, C., *see* JACOBSON, M.
HARDY, R. Cane mill roller casting.. 338
Continuous centrifugals. (Abs.).. 309
HAREL, J. R. Electric reheaters. (Abs.) 338
Juice weigher. (Abs.) 211
HARNED, R. L. Glutamic acid production. (Pat.) 187
HARRIS, R. H. G. Effect of nitrogen on *Numicia viridis* fecundity. (Abs.) 49
HARSÁNYI, I. and KUBOVICS, R. Pneumatic beet pulp conveying. (Abs.) 87
HART, C. W. Cane harvesting. (Pat.) 316
HARTL, H. and WELLENHOFER, K. Automatic boiling control at Tulln 86
HASE, S. *et al.* Refined and white sugar analysis. (Abs.) 346

PAGE

HASSAN, G., *see* KHAN, M. I.
HATMOSOEWARNO, S. Cane spacing and borer attack. (Abs.) 174
White top borer host plants. (Abs.) 335
HAUFE, W. Electronic data processing in beet breeding. (Abs.) 50
HAUMER, J., *see* RAANÝ, M.
HAVLOVÁ, E., *see* OSVALD, R.
HAVRÁNEK, A. *et al.* Forced ventilation of stored beet. (Abs.) 180
HAWAIIAN DEVELOPMENT CO. Continuous sugar-containing liquid analysis. (Pat.) 93
Massecuite crystal content determination. (Pat.) 220
HAWAIIAN SUGAR PLANTERS' ASSOCIATION, *see* GIBSON, W. O., REDDITT, W. M., NICKELL, L. G. *and* SLOANE, G. E.
HEATHCOTE, G. D. Beet protection against aphids and viruses. (Abs.) 19
Effect of beet spacing and planting time on aphid infestation and virus yellows spread. (Abs.) 369
HEBERT, L. P. and JAMES, N. I. Cane fibre determination. (Abs.) 215
HECKER, R. J., *see* BILGEN, T.
HEMSY, V. Argentina sugar industry productivity. (Abs.) 85
HENDERSON, D. W. *et al.* Overhead irrigation in California. (Abs.).. 82
HENDERSON, M. T., *see* LEGENDRE, B. L.
HENRY, V. Animal fodder from beet sugar factory and distillery products. (Abs.) 121
HENSLEY, S. D. Borer control in Louisiana. (Abs.) 368
and MARTORELL, L. F. Cane borer strains in Louisiana and Puerto Rico. (Abs.) 17
HERČÍK, J. and JOZEFY, V. Beet diffuser corrosion and wear prevention. (Abs.) 149
HERCULES INC., *see* BUHL, F. C.
HERINEANU, I. *et al.* Calcium and magnesium determination in molasses. (Abs.) 251
HERITAGE, G. *et al.* Cane train scheduling. (Abs.) 52, 205
HERNÁNDEZ R., O. Instruments in Mexican sugar factory. (Abs.).. 277
HERNBERG, G. Finland refineries. (Abs.) 88
HESCH, R. Bagasse board manufacture in Réunion. (Abs.) 121
and FRERS, H. Bagasse board factory in Pakistan. (Abs.) 121, 218
HESSTON MANUFACTURING CO. INC., *see* ROLLINS, E. C.
HEYENS, E. J. E. Beet conveyor.. 380
HIBBERT, D. *et al.* White sugar visual assessment and reflectance measurement 227
HICKSON, J. L. Sucrose by-product research. (Abs.) 218
HIDI, P. Clarification colloid chemistry 216
HILADO, A. Sugar factory output calculation. (Abs.) 210
HILL, J. N. S. Soil "contouring" in South Africa. (Abs.) 368
HILL, J. W. Vacuum pan. (Abs.) 21
HILLS, F. I. *et al.* Beet yellows and mosaic control. (Abs.) 307
HILLS, F. J., *see* HENDERSON, D. W.
HILLS, O. A. and BRUBAKER, R. W. Curly top virus infection by beet leafhopper. (Abs.) 176
HILTON, H. W. Chemical weed control 241
see also OSGOOD, R. V.
HIROSE, A., *see* IWASHINA, S.
HIRSCHMÜLLER, H. and DELAVIER, H. J. Yugoslavia sugar industry 213
see also DELAVIER, H. J.
HITACHI SHIPBUILDING & ENGINEERING CO. LTD. Continuous centrifugal 59
HITCHCOCK, B. E. Army worm control 336
Grub control. (Abs.) 142
Soldier fly control. (Abs.) 336
HITCHCOCK, J. C., *see* ALDOUS, M. W.
HITZEL, H., *see* ELMER, J.
HO, P. Y. Cane agriculture in Taiwan 109
HOFFMANN-WALBECK, H. P., *see* SCHNEIDER, F.
HOGG, B. M., *see* CHINLOY, T.
HOLLAUS, F. Formalin distribution in beet diffusion. (Abs.) 310
and POLLACH, G. Formalin determination in diffusion juice. (Abs.).. 314
HOLMES, H. M. Weed control with "Phenmedipham". (Abs.) 112

PAGE

HOMOLAR, B. Determination of O_2, CO_2 and temperature distribution in beet piles. (Abs.) 310
HONDA, S. Automatic boiling control 342
HONIRON INC., *see* FARMER, J.
HOOD, G. A. Estimating cane damage by rats. (Abs.) 110
HOOVER, D. A., *see* BICHSEL, S. E.
HORSLEY, D. R., *see* STEVENSON, N. D.
HOUGH, L. Sucrose derivatives. (Abs.) 184
HOUGHTON, S. Tube expanding. (Abs.) 21
HOWES, A. M. *et al.* Conglomeration reduction in boiling. (Abs.) 375
HOYNAK, P. X. and BOLLENBACK, G. N. Liquid sugar density. (N.B.) 151
HRDINA, M., *see* NEUŽIL, L.
HRDLIČKÁ, J. and JANÍČEK, G. Cane molasses volatile carbonyl compounds. (Abs.) 251
HRDLIČKA, V. and VALTER, V. Automatic control of stored beet forced ventilation. (Abs.) 22
HRUPÍŠEK, J. Carbonatation effect on thick juice purity. (Abs.) 212
HSIA, Y. J. Cane hilling-up. (Abs.).. 306
HSIEH, W. H., *see* LEU, L. S.
HSIEH, Y. H., *see* FU, H. C.
HSU, W. C. Cane mechanization and transport in Taiwan. (Abs.) 306
HUBER, H. Power production costs in sugar factory. (Abs.) 340
and STOLZ, W. Power production in sugar factories. (Abs.) 22
HUCULAK, A. Beet campaign length optimization. (Abs.) 148
HUEI, L. W. and JEIH, T. Y. Cane rotation with pineapple. (Abs.).. 306
HUGHES, C. G. Cane disease control in Australia. (Abs.) 141
Cane leaf scald acute stage. (Abs.).. 336
Fiji disease control in Australia... 205
Ratoon stunting and Fiji disease in Australia. (Abs.) 204
HULETT, J. R., *see* DE BROGLIO, A.
HULL, R. Beet yellows control in UK 113
Beet yellows virus effects. (Abs.).. 144
and SCOTT, R. K. Beet seed growing trials. (Abs.) 51
HULL, R. J. Johnson grass life cycle 14
HUMBERT, R. P., *see* TROUSE, A. C.
HUNG, T. W., *see* LU, C. J.
HURASKY, R. Thick juice storage .. 371
HUSSAIN, M. A. Acetic acid production from cane molasses. (Abs.) 121
HUSSAIN, N., *see* KHAN, M. I.
HUTCHINSON, P. B. Standard cane disease nomenclature. (Abs.) 80
HUTZL, L. Chile sugar industry. (Abs.) 246
HWANG, C. M., *see* LU, C. J.

IBRAGIMOV, M. T., *see* GAL'PERIN, A. S.
ICHIKAWA, K. *et al.* Steffen waste treatment. (Abs.) 55
IIZUKA, H. *et al.* Effects of cane molasses irradiation on fermentation 379
IL'IN, M. I. and PUGACHEV, V. I. Centrifugal massecuite feed valve 117
ILNICKA-OLEJNICZAK, O., *see* SKIBA, J.
IMPERIAL CHEMICAL INDUSTRIES LTD. Polyether polyol production from sucrose. (Pat.) 60
INTERNATIONAL HARVESTER CO., *see* BAROWS, A. G. *and* QUICK, D. J.
INTERNATIONAL MINERALS & CHEMICAL CORP. Glutamic acid production from beet molasses. (Pat.) 60
IONESCU, T. and DOMSA, F. Refinery liquor ion exchange treatment.. 181, 343
IRVINE, J. E. Cane cold resistance determination. (Abs.) 45
Cane frost damage in Louisiana .. 15, 305
ISÁK, H. Beet growing for seed. (Abs.) 143
Beet seed production in Austria .. 18
ISLAM, M. A. Bagasse pulp production 154, 284
ITO, H., *see* ANDO, T., IIZUKA, H. *and* KAMODA, M.
ITO, Y. *et al.* Refinery liquor treatment by ion exchange. (Abs.) 24
see also AMANO, M.
IVANOV, S. Z. and CHIKIN, G. A. Syrup pH and ion exchange treatment. (Abs.) 150
and LYGIN, E. S. Sugars dissociation *et al.* Sucrose autocatalytic decomposition. (Abs.) 28 377
see also MIL'KOVA, Z. A., PRONINA, V. A. *and* ZUBCHENKO, A. V.

INDEX

PAGE

IVANOVA, L., *see* MIAGKOV, O.
IVANOVA, L. I., *see* CHIKIN, G. A.
IVANOVA, L. K., *see* ZAGORUL'KO, A. Y.
IVIN, P. C. Phosphate determination in cane juice. (Abs.) 57
IWAKURA, T., *see* SUZUKI, K.
IWASHINA, S. and ABE, M. Affined syrup clarification with polyphosphates. (Abs.)..... 24
et al. Affined syrup clarification with polyphosphates. (Abs.)..... 24
IZATT, L. K. Cover crop in Australia 336

JAAG, O. Distillery waste treatment 26
JABBAR, A. and YUSUF, N. D. Photoperiod effects on cane varietal performance. (Abs.)..... 275
JACOBSON, M. *et al.* Wireworm sex attractant. (Abs.)..... 19
JAGGI, S. C. Cane juice sampler. (Abs.) 85
JAIN, N. C., *see* VARMA, N. C.
JAISWAL, B. R., *see* RAJANI, V. G.
JAISWAL, S. J. and BHATIA, I. S. Grassy shoot disease. (Abs.).... 17
JAISWAL, S. P. and RISHI, A. K. Soil fumigation effect on cane. (Abs.) 79
JAMES, D. W. *et al.* Potassium fertilizer trials in US. (Abs.) 18
JAMES, G. L. Cane smut in Rhodesia 49
Cane smut spore viability. (Abs.).. 241
JAMES, G. P., *see* DENNY, R. I.
JAMES, N. I. Cane breeding in Florida 207
see also HEBERT, L. P.
JAMES, R. A., *see* MURRY, C. R.
JANÍČEK, G., *see* HRDLIČKÁ, J.
JÁNOSFY, K. Continuous vacuum pan 374
JANUSZEWICZ, I. and MOSSAKOWSKA, K. Micro-organisms in beet juices .. 180
– Micro-organisms in Polish sugar.. 280
JÄSCHKE, W. Sugar quality standards in East Germany. (Abs.)..... 282
JASSEM, M. Beet breeding research.. 82
JEHU, R. Y. and STACHENKO, S. Filter-cake sweetening-off at Montreal refinery. (Abs.)..... 181
JEIH, T. Y., *see* HUEI, L. W.
JENKINS, G. H. Sugar technology reviews. (N.B.) 151
JENNINGS, R. P. Sucrose inclusion ratio and impurities reduction.. 90
see also BRUIJN, J.
JENSEN, E. D. *C*-massecuite yield calculation. (Abs.)..... 52
JOHNSON, A. R. and STURDIVANT, A. T. Sorghum and cane syrup analyses 27
JOHNSON, R. C. Soil fumigation for nematode control and beet planting 337
JOHNSON, R. N. Automatic boiling control. (Abs.) 21
JONES, A. L. Cane soil determination 89
Sucrose crystal shape determination 57
JONES, F. G. W. and DUNNING, R. A. Beet pests in UK. (N.B.)..... 151
JONES, P. W. Gears. (Abs.)..... 21
JONES, R. A., *see* BARTLETT, D. H.
JORGENSEN, J. D. and GADDIE, R. Decomposition of molasses-beet pulp pellets in storage. (Abs.).. 347
JORGENSON, E. C. Effect of nematicide application to soil on beet yields 242
Nematode control. (Abs.)..... 242
JORRITSMA, J. and OLDFIELD, J. F. T. Beet sampling, topping and analysis. (Abs.)..... 346
JOSEPH, A. Automatic boiling control 85
JOSHI, K. V. Phosphate fertilizer research in India. (Abs.)..... 206
JOSHI, M. G. Molasses conditioning.. 309
JOSHI, R. D. Evaporator tube cleaning 278
Massecuite frothing in crystallizers.. 278
see also BHARGAVE, K. S.
JOZEFY, V., *see* HERČÍK, J. *and* VEJBORA, O.
JULLIENNE, L. M. S. A., *see* BUCHANAN, E. J.
JUNEJA, I. S., *see* GUPTA, A. P.
JUNG, E. V. Beet pulp press. (Pat.).. 253
JUREWICZ, L. BUM U4M-2 beet piler 118

KACPRZAK, R., *see* GAWRYCH, S.
KADLEC, P. and BURIÁNEK, J. Electrodialysis. (Abs.) 373
see also BRETSCHNEIDER, R.
KAETHER, W. and DIETZEL, W. Cane diffuser. (Pat.) 316
KAGA, T., *see* SUZUKI, K. *and* YAMANE, T.

PAGE

KAGANOV, I. N. Refining. (N.B.).... 26
see also TUZHILKIN, V. I.
KAJIYAMA, T. and YAMAGUCHI, A. Centrifugal massecuite charging.. 342
KALRA, A. N. *et al.* Cane borer parasite in India. (Abs.)..... 175
KAMINSKII, G. A. *et al.* Centrifugal drive coupling. (Abs.)..... 22
KAMODA, M. *et al.* Needle-shaped crystal formation in massecuite.. 376
see also ANDO, T.
KAMPE, W. Herbicides and beet plant density. (Abs.) 83
KAPOOR, B. D., *see* SHUKLA, J. P.
KARA-MURZA, S. *et al.* Dextrose decomposition products. (Abs.).... 90
KARLSSON, J. B. DDS cane diffusion in Brazil 40
KARPOVICH, N. S., *see* LYSYANSKII, V. M.
KARTASHOV, A. K. *et al.* Carbonatation. (Abs.) 213, 246, 247
see also GOLUBEVA, A. D., KRAVETS, Y. O., SHOIKHET, S. L., VORONA, L. G. *and* ZHIZHINA, R. G.
KATIYAR, R. K., *see* RAJANI, V. G.
KATS, B. I. and OSITYANSKII, A. S. Clarifiers *vs.* filter-thickeners .. 247
KAZAKOV, E. F. Optimum beet campaign length. (Abs.)..... 247
KAZENAS, L. D. Beet rotting in storage 55
KELKAR, M. R. Cane varietal disease resistance in India. (Abs.)..... 14
KEMMER, F. N., *see* SCHANTZ, J. C.
KENNING V., G., *see* DE ULLIVARRI, R. F.
KHAN, M. M. I. and MUHAMMAD, C. K. Cane planting and fertilization and borer incidence. (Abs.)..... 274
et al. Cane ratooning tests in Pakistan 142
KHARCHENKO, G. Z., *see* POKANEVICH, A. V.
KHARIN, S. E., *see* SAPRONOV, A. R. *and* ZUBCHENKO, A. V.
KHASILEV, E. S., *see* GLEIZER, I. F.
KHEIZE, N. V. *et al.* Optimum beet campaign length. (Abs.)..... 247
KHELEMSKII, M. Z. Beet storage. (Abs.) 23
KHIZHNYAK, A. I., *see* PODGAETS, S. I.
KHODURSKII, E. A. and CHECHEL', N. S. Micro-organisms determination in diffusion juice and press water.. 217
KHOKHLOV, E. I., *see* VYAZNIKOV, A. K.
KHVALKOVSKII, T. P. Massecuite Brix and run-off sugar content calculation. (Abs.)..... 372
Molasses formation. (Abs.)..... 27
see also ZAGORUL'KO, A. Y.
KICHIGIN, N. M., *see* EMEL'YANOV, N. A.
KIDMAN, D. C., *see* JAMES, D. W.
KIKUCHI, U., *see* MURAOKA, K.
KIMURA, O., *see* AMAKO, K.
KING, N. J. Cane breeding. (Abs.).. 205
Nitrogen fertilizers in Australia .. 141
KIRBY, L. K. Continuous centrifugal performances. (Abs.)..... 21
KIRSTEIN, A. and CARRENO, P. A. Cane handling at Okeelanta. (Abs.)....20, 46
KISELEV, A. N. and GOLUBEV, V. N. Colour removal with active carbon. (Abs.) 248, 281
KISHIYAMA, J., *see* HILLS, F. I.
KLAUSHOFER, H., *see* PERSCHAK, F.
KLEINERMAN, A. S., *see* ZHADAN, V. Z.
KLOCHKOVA, T. A. and BALASHOVA, T. A. Effect of syrup ion exchange treatment on refined sugar. (Abs.) 24
KNYAZEVA, R. S., *see* GRYUNER, V. S.
KOCH, F. and SCHRÖTER, E. Beet leaf spot control. (Abs.)..... 307
– Beet sugar manufacture. (Pat.) .. 317
KOELSCH, L. M. Beet pulp defibrating 187
Beet sugar extraction. (Pat.)..... 317
KOHL, R. A. and CARY, J. W. Beet wilting control. (Abs.)..... 369
KOK, C. A., *see* YOON, C. N.
KOLESNIKOV, V. A. and MAKSYUTOV, V. A. Cold-hot liming. (Abs.).... 86
et al. Carbonatation. (Abs.)..... 340
– Invert sugar decomposition in heated solutions. (Abs.)..... 28
see also DOBROVOL'SKAYA, L. N. *and* MAKSYUTOV, V. A.
KOMOTO, M., *see* TSUCHIDA, H.
KOPŘIVA, B. Reducing sugars determination. (Abs.) 119
KORNIENKO, L. I., *see* LADANYUK, A. P.
KOROBEINIKOVA, L. A., *see* ZAGORUL'KO, A. Y.

PAGE

KOSIAVEVICH, A. Cuban evaporators 339
KOSTENYUK, A. M., *see* DAN'KO, A. V.
KOSTYRINA, L. A., *see* ZAGORUL'KO, A. Y.
KOSTYUK, V. I., *see* ROZINSKII, A. A.
KOT, Y. D. and GLYGALO, E. M. Massecuite rheological properties. (Abs.) 28
and POLOZENKO, L. P. Vacuum pan dimension calculation. (Abs.).... 55
see also BRENMAN, S. A. *and* POPEREKA, I. K.
KOVAČOVÁ, G., *see* VAŠÁTKO, J.
KOVAL', E. T., *see* DATSENKO, N. M.
KOVAL', V. G., *see* GRIVTSEVA, E. A.
KOZAK, A. M. and SOLOMYKIN, V. A. Exergy loss calculation in evaporators. (Abs.) 279
KOZLOVA, N. A., *see* GRYUNER, V. S.
KOZYAVKIN, A. P. *et al.* Syrup electrodialysis effect on boiling. (Abs.).. 179
see also POPEREKA, I. K. *and* VOLOSHANENKO, G. P.
KRACKLAUER, A. C. Filter cake removal 157
KRÁLOVÁ, M. and VALTER, V. Sugar solution apparent purity determination. (Abs.) 345
KRAVETS, Y. O. *et al.* Syrup decolorization with granular carbon. (Abs.) 88
KRETSCHMER, B. Chile sugar industry 118
KRIEGER, O., *see* SIMON, P.
KRISHNAMURTHY, T. N., *see* AVASTHY, P. N.
KRÖCHER, R. Packaging machine accidents. (Abs.) 280, 372
KUBADINOW, N. Effect of pH on beet juice colour. (Abs.)..... 313
and WIENINGER, L. Beet amino-nitrogen determination. (Abs.).. 313
see also WIENINGER, L.
KUBOVICS, R., *see* HARSÁNYI, I.
KUCERA, J., *see* RODRÍGUEZ, O.
KUDO, S. and AMAKO, K. Pressure drop through bone char bed. (Abs.) 24
KUDRIASHOV, B. Active carbon from bagasse. (Abs.) 379
KUKHARSKII, A. A. and BOTIN, A. N. Limestone and kiln fuel handling 280
KULIK, M. I., *see* KHEIZE, N. V.
KULIK, Z. Sugar factory equipment failures. (Abs.) 245
KULKARNI, D. P. Sucrose crystallization and boiling. (Abs.)..... 309
and UNDE, J. R. DDS diffusion at Sakharwadi. (Abs.)..... 308
KULKARNI, R. K. Juice scale. (Abs.) 308
KUNIN, R. Ion exchange treatment of juices and syrups. (Abs.)..... 177
and POLLIO, F. Refinery syrup ion exchange treatment. (Abs.).... 181
KUO, L. S. Soil salinity in Taiwan .. 366
KUO, T. T. *et al.* Cane bud damage by black rot and pineapple disease.. 367
KUTSENKO, B. A., *see* ARKHIPOVICH, N. A.
KVACHEVA, N. K. Syrup ion exchange decolorization. (Abs.) 342

LAABER, F., *see* DE MARBAIX, M.
LABY, H. *et al.* Beet breeding in France 50
LADANYUK, A. P. *et al.* Evaporator dynamic characteristics. (Abs.).. 341
LAGUERRE, H. Waste water treatment 374
LAKHDIVE, B. A. Nitrogen and potash uptake by beet. (Abs.)..... 369
LAL, A. B., *see* VARMA, N. C.
LAL, K. N. *et al.* Cane nutrient deficiency and drought resistance.. 14
B. H. LA LONE CO. INC., *see* MEGOWEN, W. J.
LANDAU, J., *see* SMÍŠEK, M.
AB LANDSVERK, *see* JUNG, E. V.
LANGE, W. H., *see* HILLS, F. I.
LANGEN, A., *see* THIELE, H.
LAPASTORA, E. P. *et al.* Cane varietal trials in Philippines. (Abs.)..... 208
see also DIVINAGRACIA, N. S.
LASKUTOVA, I. M. and PANFEROVA, E. V. Beet dirt content determination. (Abs.)..... 27
LASSOTA, L. A., *see* MACLEOD, N. A.
LATTEUR, G., *see* DETROUX, L.
LAUDEN, L. L. Cane breeding in US. 368
Cane hybridization with mosaic-resistant wild canes in US (Abs.).. 15
Cane planting. (Abs.)..... 274
Cane stalk breakage by wind in Louisiana. (Abs.)..... 207
L.62-96 cane variety. (Abs.)..... 141

INDEX

PAGE

GUERRIER, P. Massecuite exhaustion 373
GUGENHAN, H. and GEGO, A. Beet thinner. (Pat.) 187
GUINART, V. Effect of cane milling on bagasse pulp yield and quality.. 347
GULMINELLI, L. Beet molasses ion exchange treatment. (Abs.)..... 55
GULYI, I. S., *see* SIRENKO, S. I.
GUPTA, A. P. and NARAIN, M. Raw sugar caking. (Abs.)..... 278
et al. Cane deterioration in storage 111
see also GUPTA, S. C.
GUPTA, K. K., *see* GUPTA, S. C.
GUPTA, K. M. *et al.* Cane white grub control. (Abs.) 46
GUPTA, N. S., *see* RAO, S. N. G.
GUPTA, S. C. Processing juice from Co 1148 cane. (Abs.) 116
and AGARWAL, S. K. D. Seed slurry preparation. (Abs.) 20
and GUPTA, A. P. Cane leaf hopper damage in India. (Abs.)..... 175
et al. Beet sugar manufacture in India. (Abs.)..... 117
– Cane juice deaeration. (Abs.).. 145, 177
– "Flocal TN 40" flocculation aid.. 116
– Milk-of-lime treatment by hydrocyclone. (Abs.) 145
– Potassium salts recovery from distillery waste. (Abs.) 185
– *Strychnos potatorum* seeds as flocculation aid. (Abs.)..... 145
– Syrup decolorization by ion exchange. (Abs.) 116
see also RANA, O. S. *and* SINGH, R.
GUPTE, S. G. Low-grade boiling. (Abs.) 309
GÜRAY, P. Juice recycling to preliming 54
Limestone consumption in Turkey.. 246
GURUMURTHY, B. S., *see* OOMMEN, T. T.
GUTHRIE, A. M. and PILCHER, J. R. Belt conveyors for sugar. (Abs.) 84
GUTSTEIN, Y. and ZUR, M. Beet leaf spot control. (Abs.)..... 144
GYURKO, P. Bacterial formation in beet seedling rhizosphere. (Abs.) 51

HAAS, G. E. Rodent-flea correlations 110
HABERICH, W. and FELBER, E. H. G. Beet juice ion exchange treatment 187
see also VON DER LINDE, H. J.
HABESHAW, D. Effect of light on sucrose translocation in beet .. 51
HADJIANTONIOU, D., *see* SCHNEIDER, F.
HAHN, E. M. Cane handling system.. 339
HAIN, A. M. Sugar factory equipment manufacture in Philippines. (Abs.) 210
HÁJEK, L. Spray irrigation and fertilizer effect on beet. (Abs.) 51
HALDEN, H. E. *et al.* Vacuum pan scale prevention. (Abs.)..... 246
HALE, D. J. and WHAYMAN, E. Multitray subsiders. (Abs.)..... 52
HALES, G. R., *see* LOTT, L. R.
HAM, G. J. Cane water requirements 305
HANÁKOVÁ, L., *see* BRETSCHNEIDER, R.
HANBURY, L. F. Effect of seed rate on mechanical beet thinning. (Abs.) 50
HANGYÁL, K. Waste water treatment at Selyp. (Abs.)..... 54
Water economy and waste water treatment in Hungarian sugar factories. (Abs.) 340
White sugar refining. (Abs.)..... 251, 375
and WÖLLER, L. Raffinose determination in beet molasses. (Abs.).... 377
et al. Dunajská Streda factory... 371
HANNA, A. D. Cane diseases. (Abs.) 80
HANZAS, P. C. and BARR, W. W. Saponin determination in white sugar. (Abs.)..... 378
see also TENG, J. I.
HARDING, C., *see* JACOBSON, M.
HARDY, R. Cane mill roller casting.. 338
Continuous centrifugals. (Abs.).. 309
HAREL, J. R. Electric reheaters. (Abs.) 338
Juice weigher. (Abs.)..... 211
HARNED, R. L. Glutamic acid production. (Pat.) 187
HARRIS, R. H. G. Effect of nitrogen on *Numicia viridis* fecundity. (Abs.) 49
HARSÁNYI, I. and KUBOVICS, R. Pneumatic beet pulp conveying. (Abs.) 87
HART, C. W. Cane harvesting. (Pat.) 316
HARTL, H. and WELLENHOFER, K. Automatic boiling control at Tulln 86
HASE, S. *et al.* Refined and white sugar analysis. (Abs.)..... 346

HASSAN, G., *see* KHAN, M. I.
HATMOSOEWARNO, S. Cane spacing and borer attack. (Abs.)..... 174
White top borer host plants. (Abs.) 335
HAUFE, W. Electronic data processing in beet breeding. (Abs.)..... 50
HAUMER, J., *see* RAANÝ, M.
HAVLOVÁ, E., *see* OSVALD, R.
HAVRÁNEK, A. *et al.* Forced ventilation of stored beet. (Abs.)..... 180
HAWAIIAN DEVELOPMENT CO. Continuous sugar-containing liquid analysis. (Pat.)..... 93
Massecuite crystal content determination. (Pat.) 220
HAWAIIAN SUGAR PLANTERS' ASSOCIATION, *see* GIBSON, W. O., REDDITT, W. M., NICKELL, L. G. *and* SLOANE, G. E.
HEATHCOTE, G. D. Beet protection against aphids and viruses. (Abs.) 19
Effect of beet spacing and planting time on aphid infestation and virus yellows spread. (Abs.)..... 369
HEBERT, L. P. and JAMES, N. I. Cane fibre determination. (Abs.)..... 215
HECKER, R. J., *see* BILGEN, T.
HEMSY, V. Argentina sugar industry productivity. (Abs.)..... 85
HENDERSON, D. W. *et al.* Overhead irrigation in California. (Abs.).. 82
HENDERSON, M. T., *see* LEGENDRE, B. L.
HENRY, V. Animal fodder from beet sugar factory and distillery products. (Abs.)..... 121
HENSLEY, S. D. Borer control in Louisiana. (Abs.) 368
and MARTORELL, L. F. Cane borer strains in Louisiana and Puerto Rico. (Abs.) 17
HERČÍK, J. and JOZEFY, V. Beet diffuser corrosion and wear prevention. (Abs.)..... 149
HERCULES INC., *see* BUHL, F. C.
HERINEANU, I. *et al.* Calcium and magnesium determination in molasses. (Abs.) 251
HERITAGE, G. *et al.* Cane train scheduling. (Abs.) 52, 205
HERNÁNDEZ R., O. Instruments in Mexican sugar factory. (Abs.).. 277
HERNBERG, G. Finland refineries. (Abs.) 88
HESCH, R. Bagasse board manufacture in Réunion. (Abs.) 121
and FRERS, H. Bagasse board factory in Pakistan. (Abs.)..... 121, 218
HESSTON MANUFACTURING CO. INC., *see* ROLLINS, E. C.
HEYENS, E. J. E. Beet conveyor.. 380
HIBBERT, D. *et al.* White sugar visual assessment and reflectance measurement 227
HICKSON, J. L. Sucrose by-product research. (Abs.)..... 218
HIDI, P. Clarification colloid chemistry 216
HILADO, A. Sugar factory output calculation. (Abs.)..... 210
HILL, J. N. S. Soil "contouring" in South Africa. (Abs.) 368
HILL, J. W. Vacuum pan. (Abs.).... 21
HILLS, F. I. *et al.* Beet yellows and mosaic control. (Abs.)..... 307
HILLS, F. J., *see* HENDERSON, D. W.
HILLS, O. A. and BRUBAKER, R. W. Curly top virus infection by beet leafhopper. (Abs.) 176
HILTON, H. W. Chemical weed control 241
see also OSGOOD, R. V.
HIROSE, A., *see* IWASHINA, S.
HIRSCHMÜLLER, H. and DELAVIER, H. J. Yugoslavia sugar industry 213
see also DELAVIER, H. J.
HITACHI SHIPBUILDING & ENGINEERING CO. LTD. Continuous centrifugal 59
HITCHCOCK, B. E. Army worm control 336
Grub control. (Abs.)..... 142
Soldier fly control. (Abs.) 336
HITCHCOCK, J. C., *see* ALDOUS, M. W.
HITZEL, H., *see* ELMER, J.
HO, P. Y. Cane agriculture in Taiwan 109
HOFFMANN-WALBECK, H. P., *see* SCHNEIDER, F.
HOGG, B. M., *see* CHINLOY, T.
HOLLAUS, F. Formalin distribution in beet diffusion. (Abs.)..... 310
and POLLACH, G. Formalin determination in diffusion juice. (Abs.).. 314
HOLMES, H. M. Weed control with "Phenmedipham". (Abs.) 112

HOMOLAR, B. Determination of O_2, CO_2 and temperature distribution in beet piles. (Abs.)..... 310
HONDA, S. Automatic boiling control 342
HONIRON INC., *see* FARMER, J.
HOOD, G. A. Estimating cane damage by rats. (Abs.)..... 110
HOOVER, D. A., *see* BICHSEL, S. E.
HORSLEY, D. R., *see* STEVENSON, N. D.
HOUGH, L. Sucrose derivatives. (Abs.) 184
HOUGHTON, S. Tube expanding. (Abs.) 21
HOWES, A. M. *et al.* Conglomeration reduction in boiling. (Abs.)..... 375
HOYNAK, P. X. and BOLLENBACK, G. N. Liquid sugar density. (N.B.).... 151
HRDINA, M., *see* NEUŽIL, L.
HRDLIČKÁ, J. and JANÍČEK, G. Cane molasses volatile carbonyl compounds. (Abs.) 251
HRDLIČKA, V. and VALTER, V. Automatic control of stored beet forced ventilation. (Abs.)..... 22
HRUPÍŠEK, J. Carbonatation effect on thick juice purity. (Abs.)..... 212
HSIA, Y. J. Cane hilling-up. (Abs.).. 306
HSIEH, W. H., *see* LEU, L. S.
HSIEH, Y. H., *see* FU, H. C.
HSU, W. C. Cane mechanization and transport in Taiwan. (Abs.).... 306
HUBER, H. Power production costs in sugar factory. (Abs.) 340
and STOLZ, W. Power production in sugar factories. (Abs.)..... 22
HUCULAK, A. Beet campaign length optimization. (Abs.) 148
HUEI, L. W. and JEIH, T. Y. Cane rotation with pineapple. (Abs.).. 306
HUGHES, C. G. Cane disease control in Australia. (Abs.) 141
Cane leaf scald acute stage. (Abs.).. 336
Fiji disease control in Australia... 205
Ratoon stunting and Fiji disease in Australia. (Abs.) 204
HULETT, J. R., *see* DE BROGLIO, A.
HULL, R. Beet yellows control in UK 113
Beet yellows virus effects. (Abs.).. 144
and SCOTT, R. K. Beet seed growing trials. (Abs.) 51
HULL, R. J. Johnson grass life cycle 14
HUMBERT, R. P., *see* TROUSE, A. C.
HUNG, T. W., *see* LU, C. J.
HURASKY, R. Thick juice storage .. 371
HUSSAIN, M. A. Acetic acid production from cane molasses. (Abs.)..... 121
HUSSAIN, N., *see* KHAN, M. I.
HUTCHINSON, P. B. Standard cane disease nomenclature. (Abs.).... 80
HUTZL, L. Chile sugar industry. (Abs.) 246
HWANG, C. M., *see* LU, C. J.

IBRAGIMOV, M. T., *see* GAL'PERIN, A. S.
ICHIKAWA, K. *et al.* Steffen waste treatment. (Abs.)..... 55
IIZUKA, H. *et al.* Effects of cane molasses irradiation on fermentation 379
IL'IN, M. I. and PUGACHEV, V. I. Centrifugal massecuite feed valve 117
ILNICKA-OLEJNICZAK, O., *see* SKIBA, J.
IMPERIAL CHEMICAL INDUSTRIES LTD. Polyether polyol production from sucrose. (Pat.) 60
INTERNATIONAL HARVESTER CO., *see* BAROWS, A. G. *and* QUICK, D. J.
INTERNATIONAL MINERALS & CHEMICAL CORP. Glutamic acid production from beet molasses. (Pat.)..... 60
IONESCU, T. and DOMSA, F. Refinery liquor ion exchange treatment.. 181, 343
IRVINE, J. E. Cane cold resistance determination. (Abs.) 45
Cane frost damage in Louisiana .. 15, 305
ISÁK, H. Beet growing for seed. (Abs.) 143
Beet seed production in Austria .. 18
ISLAM, M. A. Bagasse pulp production 154, 284
ITO, H., *see* ANDO, T., IIZUKA, H. *and* KAMODA, M.
ITO, Y. *et al.* Refinery liquor treatment by ion exchange. (Abs.)..... 24
see also AMANO, M.
IVANOV, S. Z. and CHIKIN, G. A. Syrup pH and ion exchange treatment. (Abs.) 150
and LYGIN, E. S. Sugars dissociation 28
et al. Sucrose autocatalytic decomposition. (Abs.)..... 377
see also MIL'KOVA, Z. A., PRONINA, V. A. *and* ZUBCHENKO, A. V.

INDEX

PAGE

IVANOVA, L., *see* MIAGKOV, O.
IVANOVA, L. I., *see* CHIKIN, G. A.
IVANOVA, L. K., *see* ZAGORUL'KO, A. Y.
IVIN, P. C. Phosphate determination in cane juice. (Abs.) 57
IWAKURA, T., *see* SUZUKI, K.
IWASHINA, S. and ABE, M. Affined syrup clarification with polyphosphates. (Abs.)..... 24
et al. Affined syrup clarification with polyphosphates. (Abs.)..... 24
IZATT, L. K. Cover crop in Australia 336

JAAG, O. Distillery waste treatment 26
JABBAR, A. and YUSUF, N. D. Photoperiod effects on cane varietal performance. (Abs.)..... 275
JACOBSON, M. *et al.* Wireworm sex attractant. (Abs.)..... 19
JAGGI, S. C. Cane juice sampler. (Abs.) 85
JAIN, N. C., *see* VARMA, N. C.
JAISWAL, B. R., *see* RAJANI, V. G.
JAISWAL, S. J. and BHATIA, I. S. Grassy shoot disease. (Abs.)..... 17
JAISWAL, S. P. and RISHI, A. K. Soil fumigation effect on cane. (Abs.) 79
JAMES, D. W. *et al.* Potassium fertilizer trials in US. (Abs.) 18
JAMES, G. L. Cane smut in Rhodesia Cane smut spore viability. (Abs.).. 241
JAMES, G. P., *see* DENNY, R. I.
JAMES, N. I. Cane breeding in Florida 207
see also HEBERT, L. P.
JAMES, R. A., *see* MURRY, C. R.
JANÍČEK, G., *see* HRDLIČKÁ, J.
JÁNOSFY, K. Continuous vacuum pan 374
JANUSZEWICZ, I. and MOSSAKOWSKA, K. Micro-organisms in beet juices .. 180
– Micro-organisms in Polish sugar.. 280
JÄSCHKE, W. Sugar quality standards in East Germany. (Abs.)..... 282
JASSEM, M. Beet breeding research.. 82
JEHU, R. Y. and STACHENKO, S. Filtercake sweetening-off at Montreal refinery. (Abs.)..... 181
JEIH, T. Y., *see* HUEI, L. W.
JENKINS, G. H. Sugar technology reviews. (N.B.) 151
JENNINGS, R. P. Sucrose inclusion ratio and impurities reduction.. 90
see also BRULJN, J.
JENSEN, E. D. *C*-massecuite yield calculation. (Abs.)..... 52
JOHNSON, A. R. and STURDIVANT, A. T. Sorghum and cane syrup analyses 27
JOHNSON, R. C. Soil fumigation for nematode control and beet planting 337
JOHNSON, R. N. Automatic boiling control. (Abs.) 21
JONES, A. L. Cane soil determination 89
Sucrose crystal shape determination 57
JONES, F. G. W. and DUNNING, R. A. Beet pests in UK. (N.B.)..... 151
JONES, P. W. Gears. (Abs.)..... 21
JONES, R. A., *see* BARTLETT, D. H.
JORGENSEN, J. D. and GADDIE, R. Decomposition of molasses-beet pulp pellets in storage. (Abs.).. 347
JORGENSON, E. C. Effect of nematicide application to soil on beet yields 242
Nematode control. (Abs.)..... 242
JORRITSMA, J. and OLDFIELD, J. F. T. Beet sampling, topping and analysis. (Abs.)..... 346
JOSEPH, A. Automatic boiling control 85
JOSHI, K. V. Phosphate fertilizer research in India. (Abs.)..... 206
JOSHI, M. G. Molasses conditioning.. 309
JOSHI, R. D. Evaporator tube cleaning 278
Massecuite frothing in crystallizers.. 278
see also BHARGAVE, K. S.
JOZEFY, V., *see* HERČÍK, J. *and* VEJBORA, O.
JULLIENNE, L. M. S. A., *see* BUCHANAN, E. J.
JUNEJA, I. S., *see* GUPTA, A. P.
JUNG, E. V. Beet pulp press. (Pat.).. 253
JUREWICZ, L. BUM U4M-2 beet piler 118

KACPRZAK, R., *see* GAWRYCH, S.
KADLEC, P. and BURIÁNEK, J. Electrodialysis. (Abs.) 373
see also BRETSCHNEIDER, R.
KAETHER, W. and DIETZEL, W. Cane diffuser. (Pat.) 316
KAGA, T., *see* SUZUKI, K. *and* YAMANE, T.

PAGE

KAGANOV, I. N. Refining. (N.B.).... 26
see also TUZHILKIN, V. I.
KAJIYAMA, T. and YAMAGUCHI, A. Centrifugal massecuite charging.. 342
KALRA, A. N. *et al.* Cane borer parasite in India. (Abs.)..... 175
KAMINSKII, G. A. *et al.* Centrifugal drive coupling. (Abs.)..... 22
KAMODA, M. *et al.* Needle-shaped crystal formation in massecuite.. 376
see also ANDO, T.
KAMPE, W. Herbicides and beet plant density. (Abs.) 83
KAPOOR, B. D., *see* SHUKLA, J. P.
KARA-MURZA, S. *et al.* Dextrose decomposition products. (Abs.).... 90
KARLSSON, J. B. DDS cane diffusion in Brazil 40
KARPOVICH, N. S., *see* LYSYANSKII, V. M.
KARTASHOV, A. K. *et al.* Carbonatation. (Abs.) 213, 246, 247
see also GOLUBEVA, A. D., KRAVETS, Y. O., SHOIKHET, S. L., VORONA, L. G. *and* ZHIZHINA, R. G.
KATIYAR, R. K., *see* RAJANI, V. G.
KATS, B. I. and OSITYANSKII, A. S. Clarifiers *vs.* filter-thickeners .. 247
KAZAKOV, E. F. Optimum beet campaign length. (Abs.)..... 247
KAZENAS, L. D. Beet rotting in storage 55
KELKAR, M. R. Cane varietal disease resistance in India. (Abs.)..... 14
KEMMER, F. N., *see* SCHANTZ, J. C.
KENNING V., G., *see* DE ULLIVARRI, R. F.
KHAN, M. M. I. and MUHAMMAD, C. K. Cane planting and fertilization and borer incidence. (Abs.)..... 274
et al. Cane ratooning tests in Pakistan 142
KHARCHENKO, G. Z., *see* POKANEVICH, A. V.
KHARIN, S. E., *see* SAPRONOV, A. R. *and* ZUBCHENKO, A. V.
KHASILEV, E. S., *see* GLEIZER, I. F.
KHEIZE, N. V. *et al.* Optimum beet campaign length. (Abs.)..... 247
KHELEMSKII, M. Z. Beet storage. (Abs.) 23
KHIZHNYAK, A. I., *see* PODGAETS, S. I.
KHODURSKII, E. A. and CHECHEL', N. S. Micro-organisms determination in diffusion juice and press water.. 217
KHOKHLOV, E. I., *see* VYAZNIKOV, A. K.
KHVALKOVSKII, T. P. Massecuite Brix and run-off sugar content calculation. (Abs.)..... 372
Molasses formation. (Abs.)..... 27
see also ZAGORUL'KO, A. Y.
KICHIGIN, N. M., *see* EMEL'YANOV, N. A.
KIDMAN, D. C., *see* JAMES, D. W.
KIKUCHI, U., *see* MURAOKA, K.
KIMURA, O., *see* AMAKO, K.
KING, N. J. Cane breeding. (Abs.).. 205
Nitrogen fertilizers in Australia .. 141
KIRBY, L. K. Continuous centrifugal performances. (Abs.)..... 21
KIRSTEIN, A. and CARRENO, P. A. Cane handling at Okeelanta. (Abs.)....20, 46
KISELEV, A. N. and GOLUBEV, V. N. Colour removal with active carbon. (Abs.) 248, 281
KISHIYAMA, J., *see* HILLS, F. I.
KLAUSHOFER, H., *see* PERSCHAK, F.
KLEINERMAN, A. S., *see* ZHADAN, V. Z.
KLOCHKOVA, T. A. and BALASHOVA, T. A. Effect of syrup ion exchange treatment on refined sugar. (Abs.) 24
KNYAZEVA, R. S., *see* GRYUNER, V. S.
KOCH, F. and SCHRÖTER, E. Beet leaf spot control. (Abs.)..... 307
– Beet sugar manufacture. (Pat.) .. 317
KOELSCH, L. M. Beet pulp defibrating 187
Beet sugar extraction. (Pat.)..... 317
KOHL, R. A. and CARY, J. W. Beet wilting control. (Abs.)..... 369
KOK, C. A., *see* YOON, C. N.
KOLESNIKOV, V. A. and MAKSYUTOV, V. A. Cold-hot liming. (Abs.).... 86
et al. Carbonatation. (Abs.)..... 340
– Invert sugar decomposition in heated solutions. (Abs.)..... 28
see also DOBROVOL'SKAYA, L. N. *and* MAKSYUTOV, V. A.
KOMOTO, M., *see* TSUCHIDA, H.
KOPŘIVA, B. Reducing sugars determination. (Abs.) 119
KORNIENKO, L. I., *see* LADANYUK, A. P.
KOROBEINIKOVA, L. A., *see* ZAGORUL'KO, A. Y.

PAGE

KOSIAVEVICH, A. Cuban evaporators 339
KOSTENYUK, A. M., *see* DAN'KO, A. V.
KOSTYRINA, L. A., *see* ZAGORUL'KO, A. Y.
KOSTYUK, V. I., *see* ROZINSKII, A. A.
KOT, Y. D. and GLYGALO, E. M. Massecuite rheological properties. (Abs.) 28
and POLOZENKO, L. P. Vacuum pan dimension calculation. (Abs.).... 55
see also BRENMAN, S. A. *and* POPEREKA, I. K.
KOVAČOVÁ, G., *see* VAŠÁTKO, J.
KOVAL', E. T., *see* DATSENKO, N. M.
KOVAL', V. G., *see* GRIVTSEVA, E. A.
KOZAK, A. M. and SOLOMYKIN, V. A. Exergy loss calculation in evaporators. (Abs.) 279
KOZLOVA, N. A., *see* GRYUNER, V. S.
KOZYAVKIN, A. P. *et al.* Syrup electrodialysis effect on boiling. (Abs.).. 179
see also POPEREKA, I. K. *and* VOLOSHANENKO, G. P.
KRACKLAUER, A. C. Filter cake removal 157
KRÁLOVÁ, M. and VALTER, V. Sugar solution apparent purity determination. (Abs.) 345
KRAVETS, Y. O. *et al.* Syrup decolorization with granular carbon. (Abs.) 88
KRETSCHMER, B. Chile sugar industry 118
KRIEGER, O., *see* SIMON, P.
KRISHNAMURTHY, T. N., *see* AVASTHY, P. N.
KRÖCHER, R. Packaging machine accidents. (Abs.) 280, 372
KUBADINOW, N. Effect of pH on beet juice colour. (Abs.)..... 313
and WIENINGER, L. Beet aminonitrogen determination. (Abs.).. 313
see also WIENINGER, L.
KUBOVICS, R., *see* HARSÁNYI, I.
KUCERA, J., *see* RODRÍGUEZ, O.
KUDO, S. and AMAKO, K. Pressure drop through bone char bed. (Abs.) 24
KUDRIASHOV, B. Active carbon from bagasse. (Abs.) 379
KUKHARSKII, A. A. and BOTIN, A. N. Limestone and kiln fuel handling 280
KULIK, M. I., *see* KHEIZE, N. V.
KULIK, Z. Sugar factory equipment failures. (Abs.) 245
KULKARNI, D. P. Sucrose crystallization and boiling. (Abs.)..... 309
and UNDE, J. R. DDS diffusion at Sakharwadi. (Abs.)..... 308
KULKARNI, R. K. Juice scale. (Abs.) 308
KUNIN, R. Ion exchange treatment of juices and syrups. (Abs.)..... 177
and POLLIO, F. Refinery syrup ion exchange treatment. (Abs.).... 181
KUO, L. S. Soil salinity in Taiwan .. 366
KUO, T. T. *et al.* Cane bud damage by black rot and pineapple disease.. 367
KUTSENKO, B. A., *see* ARKHIPOVICH, N. A.
KVACHEVA, N. K. Syrup ion exchange decolorization. (Abs.) 342

LAABER, F., *see* DE MARBAIX, M.
LABY, H. *et al.* Beet breeding in France 50
LADANYUK, A. P. *et al.* Evaporator dynamic characteristics. (Abs.).. 341
LAGUERRE, H. Waste water treatment 374
LAKHDIVE, B. A. Nitrogen and potash uptake by beet. (Abs.)..... 369
LAL, A. B., *see* VARMA, N. C.
LAL, K. N. *et al.* Cane nutrient deficiency and drought resistance.. 14
B. H. LA LONE CO. INC., *see* MEGOWEN, W. J.
LANDAU, J., *see* SMÍŠEK, M.
AB LANDSVERK, *see* JUNG, E. V.
LANGE, W. H., *see* HILLS, F. I.
LANGEN, A., *see* THIELE, H.
LAPASTORA, E. P. *et al.* Cane varietal trials in Philippines. (Abs.)..... 208
see also DIVINAGRACIA, N. S.
LASKUTOVA, L. M. and PANFEROVA, E. V. Beet dirt content determination. (Abs.)..... 27
LASSOTA, L. A., *see* MACLEOD, N. A.
LATTEUR, G., *see* DETROUX, L.
LAUDEN, L. L. Cane breeding in US. 368
Cane hybridization with mosaic-resistant wild canes in US (Abs.).. 15
Cane planting. (Abs.)..... 274
Cane stalk breakage by wind in Louisiana. (Abs.)..... 207
L.62-96 cane variety. (Abs.)..... 141

INDEX

PAGE

LAUDON, A. Sugar manufacture and refining in Sweden. (N.B.)..... 249
LAUER, K. *et al.* Levulose and dextrose recovery from sucrose-invert solution. (Pat.)..... 348
LEBRUN, A., *see* DARPOUX, H.
LEDESMA, F. I., *see* GIBE, J. N.
LEDOGA, S.p.A., *see* NOBILE, L.
LEE, C. S., *see* LIN, S. C.
LEE, R. Cane sugar factory calculations with computer. (Abs.)..... 85
LEES, R. D., *see* BUHL, F. C.
LEGENDRE, B. L. *et al.* Cane stalk sampling for weight, etc. measurement. (Abs.)..... 140
LE GRAND, F., *see* CASSELMAN, T. W.
LE GUEN, F. Laboratory instrument maintenance and repair. (Abs.).. 20
LEHÓCZKI, J. Beet pulp dryer. (Abs.) 54
LEIBOVICH, D. M., *see* ZELIKMAN, I. F.
LEMAITRE, A., *see* DEVILLERS, P.
LEONOR, M. F. Bagasse carbonization 122
LESAFFRE ET CIE. Animal fodder from molasses and vinasse. (Pat.).... 349
LESCURE, J. P., *see* DEVILLERS, P.
LEU, L. S. and HSIEH, W. H. Leaf blight control in Taiwan. (Abs.) 80
LEVERINGTON, K. C. Irrigation trials in Rhodesia. (Abs.)..... 241
LEVIN, I. I., *see* GREBENYUK, S. M.
LEWELLEN, R. T. *et al.* Beet virus yellows investigations. (Abs.).... 337
see also MCFARLANE, J. S.
LI, H., *see* KUO, T. T.
LILLY, C. E., *see* JACOBSON, M.
LIMANSKAYA, A. Y., *see* GOLUBEVA, A. D.
LIN, S. C. and LEE, C. S. Cane white leaf disease. (Abs.)..... 274
LINCOLN, L. Centrifugal basket corrosion. (Abs.)..... 338
LINDSAY, L. Cane plant establishment in peat pots. (Abs.)..... 274
LIPETS, A. A., *see* LITVAK, I. M.
LIPPE, F. G. and SUPPAN, F. Juice and raw sugar solution treatment .. 316
LITVAK, I. M. *et al.* Beet molasses electrodialysis. (Abs.)..... 179
LITVINYUK, R. Effect of preceding crops on beet yield. (Abs.)..... 113
LIU, K. C. Proceedings of 13th Congress of ISSCT. (N.B.)..... 56
LODOS, J. Furfural production from bagasse. (Abs.)..... 29
LÖFFLER, H., *see* MÄCHLER, M.
LOILIER, M., *see* DEVILLERS, P.
LONGMAN, S. E. Cane planter. (Pat.) 188
LONKAR, M. Y. and PATHAK, A. D. Bold grain boiling. (Abs.)..... 309
LOOMIS, R. S., *see* HENDERSON, D. W.
LOPEZ, M. E., *see* ESCOBER, J. T.
LOSS, F. Palatinose derivatives. (Abs.) 119
LOTT, L. R. and HALES, G. R. Standard liquor storage. (Abs.)..... 87
LOUDON, T. R., *see* WILLIAMS, J. C.
LU, C. J. *et al.* Heat balance determination and utilization. (Abs.).... 243
LUCCI, G. C. and MANTOVANI, G. Effect of beet treatment for *Cercospora* leaf spot. (Abs.)..... 90
LUCE, G. W. Continuous vacuum pan 131, 170
LUJÁN C., S. Weed control in Mexico 111
LYGIN, E. S., *see* IVANOV, S. Z.
LYONS, J. W., *see* DEXTER, S. T.
LYONS, T. C. Cane land drainage in Puerto Rico. (Abs.)..... 208
LYSIKOV, V. P., *see* DATSENKO, N. M.
LYSYANSKII, V. M. and KARPOVICH, N. S. Temperature and extraction effects on cossette dimensions .. 247
and VERKHOLA, A. P. Mass transfer in beet diffusion. (Abs.)..... 149
see also ZHMYRYA, L. P.

MAAG, G. W. Metals and nitrogen determination in beet. (Abs.).... 251
MAAS, G., *see* ORTH, H.
MCALEESE, C. M. Cane damage by wild pigs in Australia. (Abs.).. 16
Chemical weed control. (Abs.).... 336
MCCORMICK, W. J., *see* CHARPENTIER, L. J.
MCCREADY, R. M., *see* GOODBAN, A. E.
MCCULLAGH, S. F. H., *see* WILLEY, L. A.

PAGE

MCDONALD, E. J., *see* FARBER, L.
MACDONALD, T. Bagasse treatment before storage for paper making.. 91
MCDOUGALL, E. Vacuum pan. (Abs.) 21
MCFARLANE, J. S. and SKOYEN, I. O. Beet varieties in US. (Abs.).... 144
et al. Beet breeding for yellows resistance in US. (Abs.)..... 307
see also LEWELLEN, R. T.
MCGAGIN, T. A. and EIS, F. G. Sucrose determination by isotope dilution 119
MCGINNIS, R. A., *see* BERNHARDT, W. O.
MCGRATH, W. F. Compressed air dryers 114
MÄCHLER, M. *et al.* Continuous purity determination. (Abs.)..... 346
MACKINTOSH, D. L. and WHITE, E. T. Sucrose crystal enclave inclusions 57
MACLEOD, N. A. *et al.* Cane molasses as pig fodder. (Abs.)..... 218
MACQUEEN, A. Moth borer. (Abs.)..47, 142
MCWHINNEY, W. and MURRY, C. R. Cane milling simulation. (Abs.).. 53
MACWILLIAM, I. C., *see* CLAPPERTON, J. F.
MADRAZO, C. M. Clarification with magnesium oxide. (Abs.)..... 210
Drought occurrence and effects on sugar factory performance. (Abs.) 210
Raw sugar quality standards in Philippines. (Abs.)..... 217
Surface-active agent in boiling. (Abs.) 178
MADSEN, R. F. Thickening filters .. 151
MAGASINER, N. Automatic boiler control. (Abs.)..... 84
MAGNUSSEN, P., *see* SCHNEIDER, F.
MAHTA, C. J., *see* PAREKH, K. H.
MAIOROV, V. V. and MAIOROVA, L. P. Evaporator tube optimum length 247
MAIOROVA, L. P., *see* MAIOROV, V. V.
MAITHANI, R. M., *see* PRABHU, K. A. *and* SHUKLA, J. P.
MAKSYUTOV, V. A. and KOLESNIKOV, V. A. pH-temperature relationship 282
see also DOBROVOL'SKAYA, L. N. *and* KOLESNIKOV, V. A.
MALAN, J. D. Cane sampling at Millaquin. (Abs.)..... 57
MALATINSZKY, G. Sangerhausen automatic centrifugals. (Abs.)..... 87
MALEC, J., *see* TRZCINSKI, W.
MALIK, P. N., *see* SANJANA, D. P.
MALM, N. R. and FINKNER, R. E. Beet leafhopper and curly top virus control. (Abs.)..... 176
MALONEY, R. Evaporator scale reduction with surface-active agent (Abs.) 20, 277, 338
MALUKARA, A. M. and YUSUF, N. D. Phosphate, irrigation and light effects on cane flowering. (Abs.).. 275
MANN, N. S., *see* SANDHU, S. S.
MANOV, E., *see* BOGDANOVA, P.
MANTOVANI, G., *see* LUCCI, G. C., SAGLIETTO, G. *and* TRABANELLI, G.
MANYAS, N. Institut für Zuckerindustrie. (Abs.)..... 117
MARIAKULANDAI, A., *see* SRINIVASAN, T. R.
MARINELLO M., J., *see* FERNÁNDEZ B., J.
MARINICH, N. I., *see* NOVIKOV, V. A.
MARIOTTI, J. A. Cane breeding in Argentina. (Abs.)..... 306
et al. Cane sampling. (Abs.)..... 306
MAROCHKO, I. A., *see* NOVIKOV, V. A.
MARTENS, M. Mechanization of beet spring work. (Abs.)..... 82
and BELIEN, J. M. "Betanal" herbicide trials. (Abs.)..... 176
MARTENS, P. H., *see* VAN STEYVOORT, L.
MARTIN, J. L. *et al.* Cane molasses as animal fodder. (Abs.)..... 92, 185
MARTÍNEZ, C. A. Raw sugar quality in Puerto Rico. (Abs.)..... 244
MARTORELL, L. F., *see* HENSLEY, S. D.
MAR'YANCHUK, V. L., *see* KHEIZE, N. V.
MASILACA, A. S., *see* STEVENSON, N. D.
MAŠKOVÁ, H. and NEUŽIL, L. Refined sugar moisture determination.. 119
MASSEY-FERGUSON (AUSTRALIA) LTD. Cane harvesters. (Pat.)..... 60
see also DRILLER, K. T. *and* ZAGORSKI, J. J.
MATEJOVÁ, J., *see* SMELÍK, A.
MATHERNE, R. J. Cane varieties in Louisiana. (Abs.)..... 15, 366
see also MILLHOLLON, R. W.
MATHES, R., *see* CHARPENTIER, L. J.
MATHUR, B. C. and SINGH, A. Planting immature cane seed. (Abs.)..... 110

PAGE

MATHUR, B. K. *et al.* Effect of plant cane nitrogen treatment on ratoon crop. (Abs.)..... 14
MATHUR, P. S., *see* PANJE, R. R.
MATTINGLY, D. C. Aerial application of herbicides. (Abs.)..... 16
MAUCH, W. Sucrose determination in beet. (Abs.)..... 378
et al. Lead and copper determination in white sugar. (Abs.)..... 251
see also BOURZUTSCHKY, H.
MAUGHAN, G. L., *see* WAYMAN, J. A.
MAYLAND, H. F. and CARY, J. W. Beet seed sowing experiments in US. (Abs.)..... 51
MAYLOTT, A., *see* FAIRHURST, G. S.
MEGGITT, W. F. Chemical weed control 143
see also FOGG, R. A.
MEGOWEN, W. J. Sugar agglomeration 186
MEHLS, K. H. F. Ion exchange treatment of waste water. (N.B.)..... 26
MEHROTRA, O. N., *see* LAL, K. N.
MEHTA, D. J. *et al.* Cane molasses spontaneous combustion. (Abs.) 145
see PAREKH, K. H.
MEHTA, J. S., *see* GUPTA, S. C.
MELESHKO, V. P. and ROZHKOVA, M. V. Sucrose effect on ion exchange kinetics. (Abs.)..... 180
MELNIKOV, N. N., *see* VYAZNIKOV, A. K.
MÉNDEZ C., T. Massecuite cooling.. 309
MENEZES, G. Cane sampler. (Abs.).. 120
MENON, K. K. Boiler scale removal.. 308
MERCADO, F. E. Ploughing in Philippines. (Abs.)..... 240
MERCADO, V. L. Philippine sacadas.. 336
MEYER, F. W. Maintenance organization. (Abs.)..... 372
MEYER, H. Beet harvesting in Switzerland. (Abs.)..... 50
MIAGKOV, O. *et al.* Cation exchange resin regeneration. (Abs.)..... 338
MICHEL, R., *see* GENOTELLE, J.
MICHEV, K. I. and BUGAENKO, I. F. Experimental carbonatation unit 55
et al. Refinery liquor carbonatation 88
MICJALOWICZ, S., *see* PULACZEWSKI, J.
MIJAKOWSKI, J. Preliming with calcium hydrosol. (Abs.)..... 86
MIKI, T. and SHIRASAKI, T. Refinery molasses drying. (Abs.)..... 121
see also ANDO, T. *and* KAMODA, M.
MIKULA, G. A. and OLEINIK, E. V. Lime kiln charging. (Abs.)..... 280
MILANOV, P., *see* BOGDANOVA, P.
MILIÁN S., C. Bagged sugar hardening 217
MILES, C. E., *see* DEXTER, S. T.
MILIĆ, M., *see* PELCIARIĆ, S.
MIL'KOVA, Z. A. *et al.* Non-sugars effect on sucrose decomposition. (Abs.) 28, 216
see also IVANOV, S. Z.
MILLER, P. H. Beet molasses non-sugars contents. (Abs.)..... 378
MILLER, R. B. and RACZUK, T. W. Cane treatment for bagasse board manufacture. (Pat.)..... 188
et al. Cane treatment for bagasse board manufacture. (Pat.)..... 188
MILLER, R. D. Nitrate nitrogen determination in beet petiole and soil 378
MILLHOLLON, R. W. and MATHERNE, R. J. Cane varietal tolerance of herbicides. (Abs.)..... 79
MILOSZ, M. Beet storage in Poland.. 245
MINER, R. C., *see* BAROWS, A. G.
MINISTERIO DE LA INDUSTRIA AZUCARERA. Cane preparation. (Pat.) 156
MIRANDA, F., *see* RODRÍGUEZ G., A.
MIRONOVA, L. I., *see* GRYUNER, V. S.
MISHCHUK, R. T. *et al.* Solution concentration and power consumption in electrodialysis. (Abs.)..... 117
see also LITVAK, I. M.
MISRA, G. N. Organic *vs.* inorganic fertilizer trials in India. (Abs.).. 14
MISRA, S. P. Centrifugal washing and steaming system. (Abs.)..... 115
MITCHELL, W.C. *et al.* New Guinea cane weevil. (Abs.)..... 110
MITOSERIU, O. G., *see* HERINEANU, I.
MITSUBISHI JUKOGYO K. K. Bulk handling. (Pat.)..... 155
MITTAL, B. L. Clarification mud levels 115
MITTAL, R. P., *see* GODBOLE, M. G.
MIYAHARA, A. Ion exchange treatment of cane juice and refinery liquor 248
MIZUMOTO, T., *see* HASE, S.
MIZUSHIMA, A., *see* HASE, S.
MOBERLY, P. K. Subsoiling effect on ratoon cane. (Abs.)..... 241
MODY, J. R. Milk-of-lime proportioning unit. (Abs.)..... 145

INDEX

PAGE

MOEBES, E., *see* ELMER, J.
MOHAN, M. Indian sugar factory technology. (Abs.) 177
and SHARMA, K. K. Clarification of juice from Co 1148 cane variety.. 116
et al. Evaporator scale removal.. 145
MOLLER, R. B. Soldier fly control.. 16
MONAGLE, D. J., *see* BUHL, F. C.
MONAZAHIAN, M. Iran sugar factories 279
MONSANTO CO. Cane growth regulant 220
MONTALVO Z., R., *see* ALEXANDER, A. G.
MONTELIBANO, J. R. A. and PFIFFNER, P. Factory inventory management at Victorias. (Abs.)..... 211
MORALES, S., *see* POTROJOV, V.
MOROZ, R. D. and SULLIVAN, J. P. Ion exchange resin properties determination. (Abs.)..... 216
MORROW, D. K. Labour utilization in South African cane agriculture.. 173
MOSER, H. B. Silver bagasse press operation. (Abs.) 114
Silver ring diffusers. (Abs.).....244, 339
MOSSAKOWSKA, K., *see* JANUSZEWICZ, I.
MOSTERT, D. B. Effect of thrust on cane mill drive. (Abs.)..... 178
MOULT, A. M. Granular carbon *vs.* bone char in refining. (Abs.).... 375
MOUNTFORT, C. B., *see* SUTHERLAND, D. N.
MOVCHAN, A. A., *see* ZHADAN, V. Z.
MUBYARTO, —. Indonesian sugar industry. (Abs.)..... 145
MUHAMMAD, C. K., *see* KHAN, M. M. I.
MUHAMMAD, W. and YUSUF, N. D. Cane growth-light relationship .. 274
MUKERJEE, T. K. Preliming effect on juice pH drop. (Abs.)..... 115
MUKHERJEE, S. *et al.* Ammonia recovery from ion exchange resin effluent. (Abs.)..... 370
MUKHIN, I. L., *see* ZAMBROVSKII, V. A.
MUKHOPADHYAY, A. N. Beet leaf spot fungi in India. (Abs.)..... 276
MULENKO, V. P., *see* SIBIRTSEV, V. G.
MÜLLER, C. A. Sugar technology glossary. (N.B.)..... 344
MULLER, G. W. Bone char physical properties. (Abs.) 215
MULVENA, T. C., *see* STEWART, P. N.
MUMFORD, D. L. Soil-borne fungi and beet seedling infection. (Abs.).. 176
MURAOKA, K. *et al.* Optimum refinery liquor carbonatation. (Abs.).... 342
MURDOCH, M. G., *see* DU TOIT, J. L.
MURO, M. *et al.* Refined sugar colour determination. (Abs.) 377
MURPHY, I. Sugar factory accidents.. 146
MURRY, C. R. and JAMES, R. A. Cane train locomotive performance.... 52
and SHANN, D. S. Cane mill feeders 151
and SHEPHERD, E. E. Cane train rolling stock utilization. (Abs.).. 52
see also MCWHINNEY, W. *and* RUSSELL, G. E.
MURTHY, A. S. S., *see* PARTHASARATHY, S. V.

NABORNEY, E., *see* POLLACK, S. B.
NAGASAKA, T., *see* IWASHINA, S.
NAGORNAYA, V. A., *see* KARTASHOV, A. K., VORONA, L. G. *and* ZHIZHINA, R. G.
NAGY, L. Hungarian sugar industry.. 279
NAIDU, K. M. and BHAGYALAKSHMI, K. V. Co 312 cane variety drought resistance mechanism. (Abs.).... 13
NARAIN, M., *see* GUPTA, A. P.
NARASIMHAN, R. and NATARAJAN, B. V. Cane forked root-hairs. (Abs.).. 45
NATARAJAN, B. V., *see* NARASIMHAN, R.
NATH, A. and BAJAJ, J. Cane seed rate and yield. (Abs.)..... 336
NATIONAL SUGAR INSTITUTE. Defeco-melt crystallization. (Abs.)..... 309
NAVARRO, R. N. Refined sugar transport in Philippines. (Abs.)..... 248
NAVIA M., D. A. Fats in cane wax.. 315
NAZAROV, P. F., *see* POKANEVICH, A. V.
NEED, O. Beet agriculture without singling. (N.B.) 26
and WINNER, C. Effect of planting to stand on beet yield 82
– Simulated hail injury and beet yields. (Abs.)..... 307
NEGI, V. S., *see* SINGH, U. S.
NEUBRUNN, F. Anionic fraction determination in beet products. (Abs.) 152

PAGE

NEUMANN, H. Molasses ion exchange treatment. (Abs.) 118
Sugar determination in beet cossettes 27
NEUVILLE, P. Bagasse diffusion..... 164
NEUŽIL, L. *et al.* Fluidized bed drying and cooling of sugar. (Abs.)....371, 373
see also MAŠKOVÁ, H. *and* TURCAJ, J.
NEWMAN, H., *see* SKOLE, R. D.
NICKELL, L. G. and TANIMOTO, T. T. Cane treatment with hormones 348
NIEDERER, J. J., *see* FOGG, R. A.
NIEDIEK, E. A. Determination of fine sugar particle size distribution.. 184
NIPPON SHIRYO KOGYO CO. LTD. Massecuite spray crystallization.. 381
NISHIDA, T., *see* MITCHELL, W. C.
NISHIHASHI, T., *see* AMANO, M.
NISSIN SUGAR MANUFACTURING CO. LTD., *see* AMANO, M.
NIX, K. J., *see* STEWART, P. N.
NOBILE, L. Sugars separation from bagasse. (Pat.) 317
NOLAN, W. J. Bagasse board production. (Abs.)..... 29
NORSEN, H., *see* WALLENSTEIN, H. M.
NOURSE, E. F., *see* HENDERSON, D. W.
NOVÁK, J., *see* RAANÝ, M.
NOVIKOV, V. A. *et al.* Beet discharge from hopper. (Abs.)..... 246
NOVOTNY, C. J., *see* ZIEVERS, J. F.
NURSE, W. Cane mill settings. (Abs.) 146

OAKES, A. J. and BOND, R. M. Cane varietal trials in Virgin Islands.. 305
and SKOV, O. Fertilizer experiments in Virgin Islands. (Abs.)..... 16
OGDEN IRON WORKS CO. Beet cleaner roll screen. (Pat.)..... 349
see also CARVER, N. E. *and* SILVER, J. M.
OIEN, S. Beet topping and harvesting in Denmark. (Abs.)..... 276
OLBRICH, H. Sake production from cane molasses. (Abs.)..... 284
OLDENBURG, C. C., *see* CAMPBELL, R. G.
OLDFIELD, J. F. T. and DUTTON, J. V. Beet storage clamps. (Abs.)..... 209
and SHORE, M. Lactic acid determination in beet sugar products..... 3
et al. Lactic acid determination in beet juice and molasses. 35
– Thick juice pH control by cation exchange 323, 355
see also JORRITSMA, J.
OLEDZKI, J. Automatic beet diffusion control. (Abs.)..... 86
OLEINIK, E. V., *see* MIKULA, G. A.
OLIVEIRA, D. A., *see* AZZI, G. M.
OLYANSKAYA, S. P. and ZHURA, K. D. Carbonatation with preliming mud removal. (Abs.) 28
OMETTO, J. C., *see* DE OLIVEIRA, H.
ONDA, F., *see* ANDO, T. *and* KAMODA, M.
ONISHKO, L. I., *see* KARTASHOV, A. K., KRAVETS, Y. O. *and* ZHIZHINA, R. G.
ONNA, K. M., *see* SLOANE, G. E.
ONTIVEROS H., D. Cane agriculture in Mexico. (Abs.)..... 275
Causes of reduced cane yields in Mexico. (Abs.) 46
OOMMEN, T. T. and GURUMURTHY, B. S. Cane molasses loss reduction by phosphoric acid clarification.... 115
– Reduced boiling house recovery calculation. (Abs.)..... 243
OPLATKA, G. Optimum beet campaign 374
ORLOVA, L. A., *see* GERASIMENKO, A. A.
ORLOVA, N. V., *see* ZAKHAROV, K. P.
ORSENIGO, J. R. Chemical weed control in Florida. (Abs.)..... 13
ORTALIZ, C. O. Computer cane payment system in Philippines. (Abs.) 210
ORTH, H. and MAAS, G. Toxic effect of herbicide-insecticide application on beet. (Abs.)..... 143
ORTIZ V., B. Cane agriculture in Mexico 141
Fertilizers in Mexico. (Abs.)..... 111
OSBORN, A. W. Fiji disease control by leafhopper sterilization. (Abs.).. 81
OSGOOD, R. V. *et al.* Cane varietal tolerance to herbicides. (Abs.).. 110
OSITYANSKII, A. S., *see* KATS, B. I.
OSTROVSKII, E. V. *see* GREBENYUK, S. M.

PAGE

OSVALD, R. and HAVLOVÁ, E. Perlite filter-aid. (Abs.) 213
OSWALD, W. J., *see* ICHIKAWA, K. *and* TSUGITA, R. A.
OWADA, Y., *see* ITO, Y.
OYAMA, Y. Bone char revivification kiln. (Abs.)..... 342
OZBEK, O., *see* SCHNEIDER, F.
OZKAN, M., *see* DOTZENKO, A. D.

PAINTER, H. A. *et al.* Sugars removal by activated sludge. (Abs.)..... 250
PALACI, J. "Saturne" cane diffusion tests. (Abs.) 370
PANDIT, N. M. and SINGH, S. N. Cane molasses as animal fodder. (Abs.) 347
PANFEROVA, E. V., *see* LASKUTOVA, L. M.
PANJE, R. R. and GILL, P. S. Beet seedling transplanting. (Abs.).. 209
et al. Cane planting experiments in India. (Abs.) 273
– Low air temperature effect on cane stalk juice. (Abs.)..... 273
PANKOVA, O. I., *see* GRYUNER, V. S.
PANOL, F. Y. Cane field soil erosion control. (Abs.) 81
Soil drainage in Philippines. (Abs.) 240, 335
see also GIBE, J. N.
PANTELEEVA, Z. N., *see* PODGAETS, S. I.
PARASHAR, D. R. Waste water treatment. (Abs.) 85, 145
PAREKH, K. H. and MAHTA, C. J. Combined beet and cane processing 116
and MEHTA, D. J. DDS cane diffuser performance. (Abs.) 116
PARES, R. D. Cane mosaic and maize dwarf mosaic viruses in US and Australia. (Abs.) 80
PARFENOPULO, M. G. Beet pulp drying time calculation. (Abs.)..... 185
PARIK, N. K. Co 6911 cane variety.. 175
PARISEK, O., *see* GRASMANN, W.
PARK, R. B., *see* SCHMALZ, C. L.
PARKER, K. J. Sucrose hydrolysis.. 184
and VLITOS, A. J. Refining research 152
and WILLIAMS, J. C. Colorant properties and isolation in refining.. 216
PARKHOD'KO, A. P., *see* BONDARENKO, N. F.
PARKINSON, G. Beet agriculture in UK 19
PARRISH, E. W. *see* BROWS, A. G.
PARSLOW, R., *see* OLDFIELD, J. F. T.
PARTHASARATHY, S. V. *et al.* Cane crop-logging and fertilization .. 206
PASTORIZA, R., *see* DE ERÉZCANO DE P., A. E.
PATEL-KULKARNI, B. C. and ABERDEE, J. E. C. Pineapple disease control 367
PATHAK, A. D., *see* LONKAR, M. Y.
PATIL, M. K. Two- and two-and-a-half massecuite boiling schemes.. 309
PATURAU, J. M. Cane sugar industry by-products. (N.B.)..... 25
PATWARDHAN, G. K., *see* RUIKAR, S. K.
PAUL, B. B. Carbonatation tank. (Abs.) 115
Continuous sulphitation tower. (Abs.) 177
Evaporator effect. (Abs.)..... 243
Incondensable gas removal from heat exchangers. (Abs.)..... 115
Syrup sulphiter. (Abs.)..... 308
Vacuum pan. (Abs.)..... 177, 308
and SAXENA, I. S. Carbonatation juice heating. (Abs.)..... 115
et al. Optimum temperature in continuous sulphitation. (Abs.).... 116
PÁVEL, I. Filter-cake removal. (Abs.) 54
PAVLOV, I. I., *see* BUGAENKO, I. F.
PAWAR, B. B. Clarification with flocculation aid. (Abs.)..... 308
PAXTON, L. Sugar factory power production. (Abs.) 146
PAYNE, J. H. Bagasse handling and storage. (Abs.).....177, 309
PEARSON, C. H. O. Cane agricultural planning. (Abs.)..... 49
PELCIARIĆ, S. and MILIĆ, M. Infection of stored beet. (Abs.) 279
PENG, S. Y. Chemical weed control in Taiwan 106, 207
and SZE, W. B. Chemical weed control. (Abs.).....274, 305
PEREIRA, H., *see* MURO, M.
PÉREZ, H., *see* BIART, J. R.
PEREZ, R. Cane molasses as hen feed 315
et al. Sugar and molasses as poultry feed. (Abs.)..... 121

INDEX

PÉREZ, R. P., *see* FISK, F. W.
PÉREZ A., H. Clarifiers 243
PERSCHAK, F. Ion exchange. (Abs.) .. 373
Ion exchange treatment of beet molasses. (Abs.) 247
and KLAUSHOFER, H. Beet juice ion exchange treatment. (Abs.) 212
PERUR, N. G., *see* DESHPANDE, P. S.
PETERS, P. Factory data collection and processing. (Abs.) 374
PETERSHOFER, G. Beet juice melanoidins and peptide determination 314
see also PREY, V.
PETRI, P. H. Vacuum pans. (Abs.) .. 375
PETZ, I. D. Beet thinner. (Pat.) 187
PFIFFNER, P., *see* MONTELIBANO, J. R. A.
CHAS. PFIZER & Co. INC. Citric acid production from molasses. (Pat.) 349
PHILLIPSON, R. T., *see* HIBBERT, D.
PHIPSON, E. H. Perforated steam coils in vacuum pan. (Abs.) 85
PICHENEZ, J., *see* BOITEAU, R.
PIECK, R. Beet diffusion water quality 214
PILCHER, J. R., *see* GUTHRIE, A. M.
PILLAI, K. T., *see* CHATTERJEE, A. C.
PINEDA L., M. Cane deterioration after harvesting. (Abs.) 306
PITTSBURGH ACTIVATED CARBON CO. Activated carbon tablets. (Pat.) 58
PIVOVAR, Z. A., *see* ZAMBROVSKII, V. A.
PIVOVAROV, A. V., *see* ZHADAN, V. Z.
PLASENCIA G., F. and GARCÍA G., J. A. Vacuum filters *vs.* filter-presses .. 338
PLAAMAN, A. J., *see* VAN STEYVOORT, L.
PLEWS, R. W. Analytical methods in refining. (N.B.) 249
PODGAETS, S. I. *et al.* Optimum beet campaign length. (Abs.) 341
POKANEVICH, A. V. *et al.* KDA-25-59M beet tower diffuser. (Abs.) 87
POLLACH, G. Continuous culture of bacteria. (Abs.) 314
see also HOLLAUS, F.
POLLACK, S. B. *et al.* Refinery liquor press filtration. (Abs.) 343
POLLERES, H. Sulphitation and sugar browning products. (Abs.) 310
see also PREY, V.
POLLIO, F., *see* KUNIN, R.
POLOZENKO, L. P., *see* KOT, Y. D.
POLYAK, M. L. *et al.* Boiler corrosion prevention. (Abs.) 213
PONANT, J. Beet and sugar mechanical handling. (Abs.) 214
PONCE DE LEÓN, R. A. Cane dry-cleaners. (Abs.) 243
POND, L., *see* ANCONA, A. J.
PONOMARENKO, A. A., *see* ZAGORUL'KO, A. Y.
POPEREKA, I. K. and KOT, Y. D. Massecuite crystal content and crystallization rate in cooling .. 341
and KOZYAVKIN, A. P. Laboratory crystallizer. (Abs.) 153
POPOV, B. A., *see* VYAZNIKOV, A. K.
POPOV, V. D., *see* SINAT-RADCHENKO, D. E. *and* SIRENKO, S. I.
PORTE, X., *see* BONNEMAISON, L.
POTAPOVA, N. M., *see* SAPRONOV, A. R.
POTROJOV, V. and MORALES, S. Cane juice neutralization by heating in air. (Abs.) 376
PRABHU, K. A. and MAITHANI, R. M. Amino-acids separation from distillery waste. (Abs.) 120
see also AROJ, K. A.
PRECISION AGRICULTURAL MACHINERY CO. Beet thinner. (Pat.) 156
see also TSCHUDY, J.
PRESTON, T. R. and WILLIS, M. B. Cane molasses as animal fodder .. 284
et al. Cane molasses as animal fodder 284
see also ELIAS, A., MACLEOD, N. A., MARTIN, J. L. *and* PEREZ, R.
PREY, V. Melanoidin formation. (Abs.) 119
and PETERSHOFER, G. Peptide determination in beet juice. (Abs.) 152
and POLLERES, H. Lactic acid determination in beet juice. (Abs.) 184
PRICE, F. B., *see* SILVER, H. F.
PRICE, S. and DANIELS, J. Cane clone cytology in Fiji. (Abs.) 14
PRIHMAK, M. P. Two-massecuite boiling scheme. (Abs.) 179
see also SABANSKII, M. S.
PRINCE, L. J. F. Cane containerization 47
PRINCE, P. A. Dissolved starch and cane juice flotation. (Abs.) 84
PRINCE, R. G. H., *see* BATSTONE, D. B.
PRINGLE, F., *see* CALEIRO, R.
PRONINA, V. A. and IVANOV, S. Z. pH and pOH temperature dependence – Thick juice pH and pOH in evaporation. (Abs.) 282
PUGACHEV, V. I., *see* IL'IN, M. I.
PULACZEWSKI, J. and MICJALOWICZ, S. Pneumatic converters. (Abs.) 341
PUNDIR, K. R. Bagasse savings in sugar factory. (Abs.) 23
PUSTOKHOD, G. P., *see* KARTASHOV, A. K.
H. PUTSCH & Co., *see* RADINGER, H. C.
PYSHNAYA, A. A. Condensate treatment for diffusion. (Abs.) 338

QUARMBY, C., *see* PAINTER, H. A.
QUICK, D. J. Cane harvester topping mechanism. (Pat.) 55
QUINTERO, J. J. Automatic boiling control. (Abs.) 188
Automatic evaporator control. (Abs.) 210

RAANT, M. *et al.* Sucrose esters formation. (Abs.) 338
RACZUK, T. W., *see* MILLER, R. B.
RADICS, I. Waste water disposal in Hungary. (Abs.) 29
RADINGER, H. C. Beet slicer. (Pat.) .. 311
RAFFINERIE TIRLEMONTOISE S.A. Surface-active agent. (Pat.) 220
RAGHIR, R. Non-sugar extraction in cane diffusion. (Abs.) 125
RAHA, A. C. Cane juice alkalinity and mud particle size. (Abs.) 278
see also MUKHERJEE, S.
RAI, K. M., *see* GUPTA, K. M.
RAJANI, V. G. *et al.* Cane leaf miner control in India. (Abs.) 27
RAMAIAH, N. A., *see* GUPTA, S. C. *and* SESHADRI, V.
RAMLOGUN, H. G. S. Tea growing on cane lands in Mauritius. (Abs.) .. 14
RAMOS, E. Bagasse pulp production .. 140
RANA, O. S. and GUPTA, S. C. Cane red rot. (Abs.) 218
RANDABEL, M., *see* VIGNES, E. C.
RANDEL, P. F. *et al.* Bagasse as animal fodder. (Abs.) 206
RAO, B. S., *see* PAUL, B. B.
RAO, D. L. N. Distillery waste as fertilizer and for potassium salts recovery. (Abs.) 315
RAO, J. T., *see* SRINIVASAN, K. V.
RAO, K. K. P. Cane "settlings". (Abs.) 29
and RAO, M. Cane intercropping with groundnuts. (Abs.) 336
RAO, M., *see* RAO, K. K. P. 206
RAO, M. M., *see* SINGH, G. R.
RAO, M. S. S., *see* SOOKASHTHAN, K.
RAO, S. N. G. and SHARMA, S. C. Clarification mud settling. (Abs.) 116
et al. Effect of cane juice constituents on clarification. (Abs.) 116
RAO, V. P. Moth borer control. (Abs.) 48, 111
RAPSON, A. K. Raw sugar drying .. 52
RAY, T. R. Masseouite graining. (Abs.) 20
T. R. RAY INC. Full pan seeding. (Abs.) 277
RAYNER, H. B., *see* REEDER, J. A.
REDDITT, W. M. Furrow irrigation .. 187
REDDY, M. G., *see* TIPPANNAVAR, M. B.
REDFEARN, G. L., *see* FLAVELL, W.
REEDER, J. A. *et al.* Sucrose ether production. (Abs.) 92
REEDER, R. L., *see* JAMES, D. W.
REICHE, H. J. *et al.* Molasses analysis and exhaustion determination .. 215
REICHEL, C. Nitrite determination in beet juice and molasses. (Abs.) .. 28
REID, D. F., *see* ALLEN, M. G.
REINEFELD, E., *see* SCHNEIDER, F.
REINHALL, R. B. Bagasse pulp manufacture. (Pat.) 253
RENFRO, G. Water loss prevention in storage reservoirs. (Abs.) 207
RENKIS, N. M., *see* ZVORYKIN, V. V.
REPINA, E. V., *see* ZELIKMAN, I. F.
RESENDE P., J. Animal fodder from cane molasses. (Abs.) 92
REVA, I., *see* MURO, M.
REVA, L. P., *see* TREBIN, L. I.
REVUZ, B. Yeast production from cane molasses. (Abs.) 121
REYES, V. C. Corrosion prevention .. 210
REYES S., E. and VELEZ R., A. Calcium silicate fertilizer trials in Puerto Rico. (Abs.) 174
RICAUD, C. Cane leaf scald in Mozambique. (Abs.) 81
RICAUD, R. Fertilizer trials in Louisiana. (Abs.) 111
RICHARDS, M. D. S. Cane varieties in Jamaica. (Abs.) 111
RISHI, A. K., *see* JAISWAL, S. P.
RISHI, N., *see* BHARGAVE, K. S.
ROBERTSON, E., *see* LEONOR, M. F.
ROBISON, B. M. Soil micro-organisms in Jamaica. (Abs.) 366
ROCHE, M. Waste water treatment with flocculation aids. (Abs.) 214
RODRÍGUEZ, C. V. Cane bulk handling in Puerto Rico. (Abs.) 208
RODRÍGUEZ, H., *see* ABARCA R., M.
RODRIGUEZ, M. L. Amino-acids determination in cane molasses. (Abs.) 377
RODRIGUEZ, M. M. Bagacillo pressing 146
RODRÍGUEZ, O. and KUCERA, J. Fermentation must chemical oxygen determination. (Abs.) 377
RODRÍGUEZ, R. *et al.* Cane diffusion and diffusers. (Abs.) 178
RODRÍGUEZ G., A. and MIRANDA, F. Soil and cane and sugar yields in Puerto Rico. (Abs.) 174
RODRÍGUEZ S., S. M. Determination of losses in deteriorated cane .. 211
ROEBUCK, D. R. Chemical weed control 83
ROGACHEV, A., *see* SABANSKII, M. S.
ROGER, J., *see* DEVILLERS, P.
ROGERS, P. Cane disease research in Uganda. (Abs.) 81
ROIG P., V. M., *see* MARIOTTI, J. A.
ROLLINS, E. C. Beet harvester. (Pat.) 124
ROMANOWSKI, R. P., *see* OSGOOD, R. V.
ROOSENSCHOON, C. F. Holland sugar industry. (Abs.) 23
ROPOTENKO, Y. G., *see* ZAMBROVSKII, V. A.
ROSE, O. S. Herbicides and beet mechanization. (Abs.) 112
ROSE, DOWNS & THOMPSON LTD. Bagasse press. (Pat.) 156
ROSEMBERG, J. A. Cane molasses fermentation. (Abs.) 92
ROSENBERG, N. Reinforced plastic application in refineries. (Abs.) .. 24, 88
ROSENHAUER, K. *et al.* Sucrose solution refractive indices. (N.B.) 312
ROTH, G. Cane stem rot control. (Abs.) 49
Cane varietal stem epidermis differences in South Africa. (Abs.) 48
ROTH, R. Molasses meal stickiness reduction. (Abs.) 154
ROUSSEL, N. and VAN STALLEN, R. Beet varietal trials in Belgium .. 83
see also SIMON, M.
ROZENTAL', L. A., *see* CHIUPAK, I. S.
ROZHKOVA, M. V., *see* MELESHKO, V. P.
ROZINSKII, A. A. and KOSTYUK, V. I. Measuring devices in beet sugar factory. (Abs.) 87
RUCIŃSKI, L. and DROZDOWSKI, T. Refinery boiling scheme. (Abs.) .. 343
RUEDA R., A., *see* VELASCO P., A.
RUIKAR, S. K. and DESHPANDE, S. B. Cane rust control. (Abs.) 207
and PATWARDHAN, G. K. Cane diseases in India. (Abs.) 206
RUÍZ M., T. Mechanical harvesting trials in Puerto Rico. (Abs.) 208
RUPPEL, E. G. Beet diseases in Arizona and BIRD, R. J. Beet virus diseases in Arizona. (Abs.) 83
RUSSEL, W. J. Beet planting date trials in New Mexico. (Abs.) 369
RUSSELL, F. B. Beet harvesting planning. (Abs.) 144
RUSSELL, G. E. Beet breeding for resistance to fungal diseases. (Abs.) 18
Beet virus yellows. (Abs.) 242
and MURRY, C. R. Cane milling efficiency. (Abs.) 19
RUTKOWSKI, M., *see* GAWRYCH, S. 53

SABANSKII, M. S. and PRIHMAK, M. P. Beet campaign length and sugar factory capacity in USSR. (Abs.) 341
and ROGACHEV, A. Bulk sugar storage and transport. (Abs.) 343
SAGAN', I. I., *see* TOBILEVICH, N. Y.
SAGLIETTO, G. and MANTOVANI, G. Raffinose and kestose determination in sucrose solutions. (Abs.) .. 345

INDEX

PAGE

SAINI, S. S. *et al.* Optimum nitrogen fertilizer dosage. (Abs.) 80
SAKALO, V. D. and VIJVAL'KO, I. G. Sugars synthesis and movement in beet. (Abs.)..... 113
SAKHUJA, K. R., *see* SANJANA, D. P.
SALÁNKI, I. Perlite filter-aid. (Abs.).. 54
SALAS, B., *see* RANDEL, P. F.
SAMANIEGO, R., *see* XUAN, V. T.
SAMUELS, G. Cane physiology. (Abs.) 174
and CAYERE, A. Sucrose losses in burnt cane. (Abs.)..... 239
SÁNCHEZ, H., *see* MURO, M.
SÁNCHEZ D., J. Mechanical harvesting in Puerto Rico. (Abs.)..... 208
SANDERS, H. L. Surface-active agents from sucrose. (Pat.) 316
SANDHU, S. S. *et al.* Cane diseases in Punjab. (Abs.) 80
SANJANA, D. P. *et al.* Clarification in India. (Abs.)..... 20, 116
SANTHANAM, N., *see* CHATTERJEE, A. C.
SANTIAGO, J. M. Villanueva and San Matilde sugar factories. (Abs.).. 85
STO. DOMINGO, J. P. Industrial engineering at Victorias. (Abs.)..... 210
SANTOS, J. B. Cane car distribution .. 239
SANYAL, L., *see* SAXENA, S. L.
SAPRONOV, A. R. Colour formation rate in glucose and invert sugar solution. (Abs.)..... 153
and DUNAEVA, K. N. Invert sugar decomposition products and melanoidin spectra. (Abs.)..... 282
and KHARIN, S. E. Effect of pH and temperature on sucrose decomposition rate. (Abs.)..... 90
and ZVEREVA, T. S. pH calculation with temperature compensation.. 282
et al. Amino-acids effect on sugar solution colour. (Abs.)..... 183
see also IVANOV, S. Z. *and* MIL'KOVA, Z. A.
SARAPH, S. K. Cane milling. (Abs.).. 308
Evaporator and juice heater efficiencies. (Abs.)..... 308
SARAY, Y. Micro-organisms in stored sugar. (Abs.)..... 87
White sugar storage in Turkey. (Abs.) 54
SARNO, R. Cane varietal trials in Sicily 79
SATPATHY, J. M. and DAS, R. K. Cane pink mealy bug in India. (Abs.).. 46
SAVENKOV, A. M., *see* KAMINSKII, G. A.
SAVITSKY, H. Beet tetraploidy induction. (Abs.)..... 83
SAWHNEY, J. S., *see* SHARMA, J. M.
SAXBY, N. Evaporator at Ookala factory. (Abs.) 370
SAXENA, H. H. N., *see* SANJANA, D. P.
SAXENA, I. S., *see* PAUL, B. B.
SAXENA, S. K., *see* PANJE, R. R.
SAXENA, S. L. and AGARWAL, S. K. D. Cane diffusion. (Abs.)..... 309
and SANYAL, L. Entrainment separator. (Abs.) 20
SÁZAVSKY, V. Heat losses in steam expansion. (Abs.)..... 86
SCARAMUZZA, L. C. Cane pest biological control in Cuba. (Abs.)..... 140
SCHAFER, L. P., *see* VICKERS, R. P.
SCHALIT, M. Guide to sugar industry literature. (N.B.)..... 312
SCHANTZ, J. C. and KEMMER, F. N. Waste water treatment and disposal in Hawaii. (Abs.) 370
SCHÄUFELE, W. R. and WINNER, C. Effect of beet seed dressing and chemical weed control on beet yield. (Abs.) 38
see also WINNER, C.
SCHILDBACH, R. Beet seed pelleting.. 50
see also VON BOGUSLAWSKI, E.
SCHIWECK, H. and BÜSCHING, L. Raffinose and galactinol determination. (Abs.) 120
see also MÄCHLER, M.
SCHLIEPHAKE, D. and WOLF, A. Beet diffusion. (Abs.) 374
– Cossette residence time in diffusion 179
– Cossette thickness and diffusion rate constant. (Abs.) 147
see also SCHNEIDER, F.
SCHMALZ, C. L. *et al.* Tare laboratory operation. (Abs.) 282
SCHMID, G. Effect of soil liming on beet yield. (Abs.)..... 83
SCHMIDT, L., *see* HAVRÁNEK, A.

PAGE

SCHNEIDER, F. West German beet campaign 1968/69. (Abs.) 117
and GEIGER, H. U. Sugars surface-active agents. (Abs.)..... 29
et al. Beet cossette scalders. (Abs.) 213
– Beet micro-organisms. (Abs.)..... 184
– Conductivity ash measurements of KCl-sucrose solutions. (Abs.).. 251
– Laboratory evaluation of tower diffusion. (Abs.) 311
– Polysaccharide-producing bacteria 216
– Sucrose decomposition by lime.. 283
see also ROSENHAUER, K.
SCHNEIDER, G. Centrifugal accidents.. 22
Sugar dust explosions. (Abs.)..... 149, 214
SCHOENROCK, K. W. R. Refined and invert sugar absorbancy. (Abs.).. 345
SCHRÖTER, E., *see* KOCH, F.
SCHWEIZER, E. E. and WEATHERSPOON, D. M. Chemical weed control.. 176
SCOTT, M. R. Surface hardened cane mill roller. (Pat.)..... 253
SCOTT, R. K., *see* HULL, R.
SEKL, K., *see* SLAVÍČEK, E.
SELEZNEVA, G. D., *see* GRYUNER, V. S.
SEMENENKO, V. Z. and SOLOV'EV, A. Forced ventilation of stored beet 22
see also KARTASHOV, A. K. and VORONA, L. G.
SENIOR, M., *see* OLDFIELD, J. F. T.
SERAPION, J. L., *see* CHU, T.
SERRÍA, G. R. Cane deterioration index calculation. (Abs.) 183
see also BALSA, J. J.
SEREDA, L. K. White sugar bound moisture and bulk storage. (Abs.) 148
see also SHEVTSOV, D. S.
SERRALLÉS, F. J., *see* RODRÍGUEZ, R.
SESHADRI, V. *et al.* Carbonatation mud for sintering and pelleting iron ore fines. (Abs.)..... 185
SETH, M. L. Cane mosaic in India. .. 13
SETH, P. P. Cane mill bearing pressures 115
SETH, S. R., *see* PANJE, R. R.
SEVOST'YANOV, S. P. Beet varieties in USSR. (Abs.)..... 113
SEXTON, J. P. Cane harvester 187, 368
SHAH, K. A. *et al.* Massecuite surface-active additive. (Abs.)..... 308
SHAH, K. S. Evaporator entrainment separator. (Abs.) 20
SHAMIRIAN, B. Effect of non-sugars on sucrose crystallization rate. (Abs.) 314
SHANN, D. S. Cane mill pressure feed chute settings. (Abs.) 53
see also MURRY, C. R.
SHAPOSHNIKOVA, Z. B., *see* GERASIMENKO, A. A.
SHARMA, J. M. *et al.* Optimum nitrogen fertilizer dosage. (Abs.) 80
see also SAINI, S. S.
SHARMA, K. K., *see* MOHAN, M. *and* SHAH, K. A.
SHARMA, S. C. Beet agriculture in Bihar. (Abs.)..... 209
Indian sugar factory technology and cane agriculture. (Abs.)..... 177
see also RAO, S. N. G.
SHARMA, S. P., *see* SINGH, H.
SHARMA, V. N., *see* SESHADRI, V.
SHAW, M. Cane milling research work of G. E. Russell. (Abs.) 53
SHAW, M. E. A. Irrigation in Jamaica 140
SHCHEGOLEV, V. N. Beet knives in USSR. (Abs.)..... 341
SHCHUPKO, T. I., *see* KARTASHOV, A. K. *and* KRAVETS, Y. O.
SHEFFIELD, F. M. L. Leafhopper as cause of cane leaf galls. (Abs.).. 274
SHEPHERD, E. E., *see* MURRY, C. R.
SHERMAN, M., *see* MITCHELL, W. C.
SHEVANDIN, N. A. Heat transfer calculation in boiling. (Abs.) 246
SHEVCHUK, G. V., *see* PODGAETS, S. I.
SHEVTSOV, D. S. *et al.* White sugar bulk storage. (Abs.)..... 22
SHIBABE, S., *see* IIZUKA, H.
SHIBUYA, M. and TANAKA, A. Cane stem maggot. (Abs.) 45
SHINADA, S., *see* AMANO, M. *and* ITO, Y.
SHIRASAKI, T., *see* ANDO, T., KAMODA, M. *and* MIKI, T.
SHIRING, E. R. and ZAGORUL'KO, A. Y. Acids in condenser water. (Abs.).. 28
SHOIKHET, A. L., *see* KARTASHOV, A. K.
SHOIKHET, S. L. and KARTASHOV, A. K. Laboratory carbonatation. (Abs.) 183
see also KARTASHOV, A. K. *and* VORONA, L. G.
SHORE, M., *see* OLDFIELD, J. F. T.

PAGE

SHUKLA, J. P. and MAITHANI, R. M. Cane molasses unfermentable reducing matter and polarization.. 120
et al. Cane molasses spontaneous combustion. (Abs.) 215
see also AROJ, K. A. *and* GUPTA, S. C.
SHUKLA, N. P., *see* GUPTA, S. C.
SHUKLA, S. P., *see* GUPTA, A. P.
SIBIRTSEV, V. G. *et al.* Automatic dosing of formalin in beet diffuser 149
SIDDIQI, M. A. Cane yellow wilt. (Abs.) 274
SIDDIQUI, Z. A. Cane pests in Ceylon 46
SIEKERT, J. R. Steam turbine maintenance. (Abs.)..... 85
SILIN, P. M. Sugar technology. (N.B.) 26
SILINA, N. P. Effect of non-sugars on sucrose solubility. (Abs.)..... 183
SILLER Y SILLER, D. Mechanical harvesting in Mexico. (Abs.)..... 111
SILVER, H. F. *et al.* Cane diffuser. (Pat.) 124
SILVER, J. M. Beet cleaner roll screen 186
see also CARVER, N. E. *and* SCHMALZ, C. L.
SIMON, M. *et al.* Potassium fertilizer application. (Abs.) 82
SIMON, P. and KRIEGER, O. Three-massecuite boiling schemes. (Abs.) 87
SIMONART, A. Beet diffuser disinfection 117
SIMONE, R. A., *see* CAMPBELL, R. G.
SIMONIS, H. Sucrose ester detergents 26
SINAT-RADCHENKO, D. E. and POPOV, V. D. Optimum massecuite cooling and curing temperature. (Abs.).. 212
– Sugar solution saturation. (Abs.) 184
– Vibrations and sugar solution heating. (Abs.) 184
SINGH, A., *see* MATHUR, B. C. *and* MATHUR, B. K.
SINGH, B. and VERMA, A. N. Nitrogen and phosphorus fertilizer trials in India. (Abs.) 173
see also PANJE, R. R.
SINGH, G. C., *see* MOHAN, M.
SINGH, G. P. and SINGH, N. Cane varietal resistance to red rot. (Abs.) 111
SINGH, G. R. Cane red rot. (Abs.).. 13
and RAO, M. M. Ratoon stunting disease in India. (Abs.) 241
SINGH, H. and SHARMA, S. P. *Parasa bicolor* pest in India. (Abs.)..... 206
SINGH, I. J. and SINGH, P. P. Cane varietal response to nitrogen in India. 167
SINGH, M., *see* GODBOLE, M. G.
SINGH, N., *see* SINGH, G. P.
SINGH, P. P., *see* SINGH, I. J.
SINGH, R. Ash determination in cane molasses. (Abs.)..... 120
and VARMA, N. C. Cane molasses exhaustibility calculation. (Abs.) 120
et al. Pan vacuum effect on boiling 116
SINGH, R. P. and VERMA, I. D. Weeds in India. (Abs.)..... 173
SINGH, S., *see* CHAKRAVARTY, B.
SINGH, S. N., *see* PANDIT, N. M.
SINGH, U. S. and NEGI, V. S. Cane varietal drought resistance. (Abs.) 48
SIPITANOS, K. M. and ULRICH, A. Beet seedling phosphorus status determination. (Abs.)..... 276
SIRENKO, S. I. *et al.* Continuous boiling 373
SIVILA, A. C., *see* GALVEZ, A. M.
SKIBA, J. and ILNICKA-OLEJNICZAK, O. Yeast production from molasses and vinasse. (Abs.) 347
SKIBINSKII, Y. B. BMA centrifugal drives. (Abs.)..... 55
SKIRSTYMONSKII, A. I., *see* GRIVTSEVA, E. A.
SKOBLO, D. I., *see* LADANYUK, A. P.
SKOLE, R. D. *et al.* Refinery micro-organisms. (Abs.) 184
SKORBUN, D. L., *see* BONDARENKO, N. F.
SKOV, O., *see* OAKES, A. J.
SKOYEN, I. O. Beet self-fertilization control. (Abs.) 369
see also LEWELLEN, R. T. *and* MCFARLANE, J. S.
SKRÁBAL, M. Beet sugar factory design and thick juice storage. (Abs.) 23
SLAJCHERT, G. Cane wash water grit separator. (Abs.) 114
SLAVÍČEK, E. and SEKL, K. Press water recycling to diffusion. (Abs.).... 149
SLESAREVA, O. I., *see* GRIVTSEVA, E. A.
SLOANE, G. E. and ONNA, K. M. Sugar solution continuous analysis. (Pat.) 188
SLYUSARENKO, T. P. and VITUKEVICH, E. P. Antiseptic for alcohol production from molasses. (Abs.).... 347

INDEX

PAGE

SMELÍK, A. *et al.* Sucrose solubility.. 378
SMÍŠEK, M. and ČERNÝ, S. Active carbon. (N.B.) 344
SMITH, B. A. Starch removal from sorghum juice. (Pat.).....124, 188
SMITH, G., *see* HERITAGE, G.
SMITH, N. H. Cane molasses colorants separation. (Abs.) 216, 346
SMITH, P. B. Chemical weed control in US. (Abs.)..... 242
SMITH, P. D. and ARCHER, H. W. Waste water treatment. (Abs.)..... 146
SMYTHE, B. M. and STAKER, R. Sugar recrystallization from aqueous alcohol. (Pat.) 187
see also GAGOLSKI, J.
SOCIÉTÉ D'ÉTUDES DE MACHINES SPÉCIALES S.A., *see* CHAMBON, L. J.
S. A. SOCIETER, *see* BALLIGNAND, E.
SOFRONYUK, L. P. Evaporator boiling-out. (Abs.) 371
SOINE, O. C. Phosphorus uptake by beets. (Abs.) 112
SOKOL, D., *see* VEJBORA, O.
SOKOLOVA, A. L., *see* BRENMAN, S. A.
SOLBERG, P. Beet pulp presses. (Pat.) 188
SOLDEVILA, M., *see* RANDEL, P. F.
SOLOMYKIN, V. A., *see* KOZAK, A. M.
SOLOV'EV, A., *see* SEMENENKO, V.
SOLOV'EVA, V. M., *see* CHIKIN, G. A.
SOLTYSIAK, J. *et al.* Boiling. (Abs.).. 214
SOMOROV, I. B., *see* EMEL'YANOV, N. A.
SOOKASHTHAN, K. and RAO, M. S. S. Cane hormones. (Abs.)..... 173
SOREAU, P., *see* LABY, H.
SPANNER, D. C. Sucrose translocation in plant cells. (Abs.)..... 205
SPARKLER MANUFACTURING CO. Filter cake removal. (Pat.) 220, 348
see also KRACKLAUER, A. C.
SPIEGELHALTER, F., *see* BÜNNAGEL, R.
SPINK, G. F. Colour removal with granular carbon. (Abs.)..... 375
SRINIVASAN, K. V. Cane smut resistance testing. (Abs.)..... 80
and RAO, J. T. Cane disease control by heat treatment. (Abs.)..... 14
SRINIVASAN, S., *see* CHATTERJEE, A. C.
SRINIVASAN, T. R. and MARIAKULANDAI, A. Effect of nitrogen and cane growth on soil moisture.. 206
– Nitrogen and moisture effect on cane. (Abs.) 241, 366
SRIVASTAVA, S. K., *see* GUPTA, S. C. *and* MUKHERJEE, S.
STACHENKO, S. Moisture determination in molasses. (Abs.) 215
see also JEHU, R. Y.
STAINES, O. J. Beet storage in UK.. 143
STAINIER, F., *see* AMAND, H.
STAKER, R., *see* SMYTHE, B. M.
STANDEN, P., *see* F. A. STANDEN & SONS LTD.
F. A. STANDEN & SONS LTD. and STANDEN, P. Beet harvester. (Pat.).. 349
STANKIEWICZ, W. Automatic liming control. (Abs.) 372
Carbonatation mud drying. (Abs.).. 121
Carbonatation mud fluidization .. 180
STAUFFER CHEMICAL CO. Phosphorylated sucrose solution electrodialysis 381
STEARNS-ROGER CORP., *see* BAUSERMAN, H. M.
STEELE, C. R., *see* SILVER, H. F.
STEFANOVIĆ, M., *see* STEGANOVIĆ, D.
STEGANOVIĆ, D. *et al.* Saponin determination and composition. (Abs.) 27
STEIB, R. J., *see* CHILTON, S. J. P.
STEINDL, D. R. L. Cane bacterial mottle. (Abs.)..... 80
Drought and ratoon stunting disease in Australia. (Abs.)..... 142
STEINECK, E. Beet juice browning products. (Abs.)..... 314
STEMBRIDGE, J. R. "Elmcobelt" filter. 20, 277
STĚPÁNOVÁ, J., *see* BRETSCHNEIDER R.
STEPHENS, B. A. Sugar and bone char dust control. (Abs.)..... 248
STERZINGER, M. Beet pulp press water filter screen. (Abs.)..... 118
STEUDEL W. and THIELEMANN, R. Aphids and beet virus yellows spread. (Abs.)..... 50
STEVENSON, D. M. Massecuite seeding in boiling. (Abs.)..... 21
STEVENSON, J. C., *see* BEVAN, D.
STEVENSON, N. D. *et al.* Cane fibre determination 70
STEWART, I. J. and BOYLE, H. L. Nitrogen application with herbicides. (Abs.) 142

PAGE

STEWART, P. N. Cane fibre determination. (Abs.)..... 57
and MULVENA, T. C. Evaporator condenser performances in Australia and NIX, K. J. Clarifier performance comparison. (Abs.) 21
STOECK, G., *see* LAUER, K.
STOLZ, W., *see* HUBER, H.
STORD BARTZ INDUSTRI A/S, *see* SOLBERG, P.
STORÉR, K. R., *see* DOTZENKO, A. D.
STORY, C. G. Cane flowering. (Abs.).. 336
Cane leaf scald. (Abs.)..... 46
STORZ, M., *see* HALDEN, H. E.
STRÁNSKÝ, K., *see* STREIBL, M.
STRATIENKO, O. V., *see* ZAMBROVSKII, V. A.
STRAUSZ, J. Cell-less rotary vacuum filters. (Abs.)..... 245
STREIBL, M. and STRÁNSKÝ, K. Cane wax fractionation. (Abs.) 217
STRICH, P. P. "Auto-Diffuser" cane diffusion. (Abs.).....20, 277
STRZERZYSZ, J. Beet pilers in Poland 340
STUDNICKÝ, J., *see* DANDÁR, A.
STURDIVANT, A. T., *see* JOHNSON, A. R.
STURGESS, O. W. Fertilizer advisory service in Australia. (Abs.)..... 205
SU, T. P., *see* FU, H. C.
SUBAYGIL, S. Colour determination in beet sugar factory products. (Abs.) 89
SUBRA, W. A., *see* DRUILHET, R. E.
SUD, V. S. Beet sugar manufacture in India. (Abs.) 19, 179
SUERTE, D. Undetermined losses... 178
SUGAWARA, M. and YAMAMOTO, K. Beet juice ion exchange treatment 340
SULITEANU, D. Jet eductor applications. (Abs.) 375
SULLIVAN, J. P., *see* MOROZ, R. D.
SUMASUNDARAM, A., *see* PARTHASARATHY, S. V.
SUPPAN, F., *see* LIPPE, F. G.
SÜSS, L., *see* MÄCHLER, M.
SUTHERLAND, D. N. and MOUNTFORT, C. B. Ion exclusion equilibria for sucrose-NaCl-water-resin. (Abs.).. 27
SUTHERLAND, T. M., *see* ELIAS, A.
SUZUKI, K. *et al.* Decolorizing resin 342
see also YAMANE, T.
SUZUKI, S., *see* HASE, S. *and* TAKAHASHI, S.
SVENSKA SOCKERFABRIKS AB. Sugar determination in water. (Pat.).. 58
SVOBODA, A., *see* BRETSCHNEIDER, R.
SWENERTON, A. K. Soil type and beet yield. (Abs.) 113
SWIETLICKA, E. Losses in mechanically-harvested beet. (Abs.)..... 51
SZE, W. B., *see* PENG, S. Y.
SZOKOL, W. Boiling and massecuite cooling. (Abs.) 314

TAKAHASHI, D. T. Nitrogen fertilizer trials in Hawaii. (Abs.) 109
Nitrogen uptake by cane. (Abs.).. 206
TAKAHASHI, S. and SUZUKI, S. Fluidized bed cooling of sugar (Abs.).. 24
TAKAMIZAWA, Y., *see* YAMANE, T.
TAKEDA YAKUHIN KOGYO K. K. Glutamic acid production from cane molasses. (Pat.)..... 349
TALBALLA, H. A. Cane seedling damage by smut. (Abs.)..... 368
TALKERNBERGER, W. D. Sugar transportation in ships. (Abs.) 84
TAMASHIRO, M., *see* MITCHELL, W. C.
TANAKA, A., *see* SHIBUYA, M.
TANCO, D. Surface-active agent in boiling. (Abs.) 178
TANDON, J. N., *see* LAL, K. N.
TANIMOTO, T. T., *see* NICKELL, L. G.
TAO, H. C. Bagasse board production 91
TARABAS, C., *see* HERINEANU, I.
TEMPER, S. I., *see* ZVORYKIN, V. V.
TENG, J. I. and HANZAS, P. C. Aflatoxins in beet pulp. (Abs.)..... 345
– "Disyston" determination in beet pulp. (Abs.)..... 378
TEREGULOV, K. G., *see* VISSARIONOV, M. M.
THIELE, H. and LANGEN, A. Automatic boiling control. (Abs.)..... 23
THIELEMANN, R., *see* STEUDEL, W.
THOMAS, P. E. Beet curly top virus hosts. (Abs.)..... 209

PAGE

THOMAS, T., *see* ALLEN, M. G.
THOMPSON, G. D. and BOYCE, J. P. Irrigation trials in South Africa.. 49
THOMSON, G. M. Cane leaf scald control in South Africa. (Abs.)..... 274
TIGLAO, J. M. Waste water treatment 210
TILLEY, L. G. W. Habana oat grass control. (Abs.) 17
TIMMONS, G. R. Bulk handling of cane 366
TIMOSHENKO, K. P., *see* ZOBNIN, P. V.
TIPPANNAVAR, M. B. and REDDY, M. G. Effect of water table on cane response to irrigation and nitrogen 111
TIPPENS, D. E., *see* POLLACK, S. B.
TIPPETT R. L. Cane mosaic infection and yield. (Abs.)..... 275
TOBILEVICH, N. Y. *et al.* Evaporator tube length effects. (Abs.)..... 149
– Sugar solution heating. (Abs.).. 184
TÖDT, F. and ABRAHAM, J. G. Invert sugar determination. (Abs.).... 22
TOLAR, C. A., *see* TOLAR, H.
TOLAR, H. Cane harvester. (Pat.).. 187
TOMER, P. S. Cane sett germination.. 46
TONINGER, K., *see* FRIML, M.
TOOHEY, C. L. Black beetle control.. 47
Cane land drainage. (Abs.)..... 16
TOPOROVSKAYA, Y. S. Beet pile fungi 311
TOURLIÈRE, S., *see* DEVILLERS, P.
TOYAMA, R., *see* MURAOKA, K.
TRABANELLI, G. *et al.* Corrosion. (Abs.) 118
– Tube corrosion resistance. (Abs.) 373
TRAUTENBERG, G. A. Cane juice treatment with bactericide. (Abs.) 85, 243
TREBIN, L. I. *et al.* Sucrose decomposition in boiling. (Abs.)..... 153
– Sugar solution thermal stability 183
TRIP, P. Sugar translocation in beet leaves. (Abs.)..... 143
TROINO, V. P. Massecuite temperature in boiling. (Abs.)..... 149
Vacuum pan hydrodynamics. (Abs.) 180
and VAISMAN, M. L. Massecuite temperature distribution in boiling.. 150
TROUSE, C. and HUMBERT, R. P. Deep tillage in Hawaii. (Abs.)..... 275
TRUEMPER, J. T. Active carbon porosity and decolorizing efficiency 216
TRZCIŃSKI, W. and MALEC, J. Beet pile forced ventilation. (Abs.) 245
– Covers for stored beet. (Abs.).... 86
– Storage of washed beet. (Abs.).. 280
TRZEBIŃSKI, J. Prevention of beet rotting in storage. (Abs.) 240
TSCHUDY, J. Beet thinning. (Pat.).. 187
TSE, C. C., *see* CHEN, R. S.
TSENTRALNOE PROEKTNA-KONSTRUKTORSKOE BJURO. Raw sugar bulk transport in ship. (Pat.)..... 219
TSUCHIDA, H. and KOMOTO, M. Dextrose melanoidin fractionation.... 376
TSUGITA, R. A. *et al.* Waste water treatment. (Abs.) 245
TSYS', V. A., *see* ZAMBROVSKII, V. A.
TUBB, E. C. Refined sugar bulk silo.. 150
TUET, L. B., *see* BUGAENKO, I. F.
TURCAJ, J. and NEUŽIL, L. Sugar moisture calculation. (Abs.).... 118
TURNER, J. E., *see* WALLIS, R. L.
TUZHILKIN, V. I. and KAGANOV, I. N. Sucrose solution boiling point elevation calculation. (Abs.).... 27
– Sucrose solution vapour pressure 119
TYULENEVA, G. N., *see* CHIKIN, G. A.

ULRICH, A., *see* SIPITANOS, K. M.
UNDE, J. R., *see* KULKARNI, D. P.
UNION TANK CAR CO. Ion exchange resin filter precoat removal.. (Pat.) 58
see also DUFF, J. H.
UNITED STATES SECRETARY OF AGRICULTURE, *see* SMITH, B. A.
US SUGAR CORP., *see* SEXTON, J. P.
UPADHIAYA, U. C. Cane milling evaluation. (Abs.)..... 211
USHER, J. F. Wild sorghum in Australia. (Abs.) 142
UTSONOMIYA, Y., *see* SUZUKI, K.

VAIDYA, V. P. Beet varietal trials in India. (Abs.) 276
VAISMAN, M. L., *see* TROINO, V. P.
VAJDA, J., *see* HANGYÁL, K.
VALLANCE, L. G. Cane harvester. (Abs.) 204
Cane mechanical harvesting in Australia. (Abs.) 173
VALSECHI, O. Cane by-products. (Abs.) 92

PAGE

VALTER, V. Decolorization with active carbon. (N.B.) ... 344
see also BOUCEK, S. HRDLICKA, V., KRÁLOVÁ, M. *and* NEUŽIL, L.
VAN DER SCHANS, C. Chemical weed control. (Abs.) ... 241
VANHOOK, A. Effect of adsorbed impurities on sucrose crystal. (Abs.) 250
VAN STALLEN, R., *see* ROUSSEL, N. *and* SIMON, M.
VAN STEYVOORT, L. *et al.* Insecticide residues in beet. (Abs.) ... 337
VARMA, N. C. *et al.* Massecuite sampler 145
see also GUPTA, S. C. *and* SINGH, R.
VARNEY CHEMICAL CORP., *see* SANDERS, H. L.
VARSA, E. C. Nitrogen dosage effect on beet. (Abs.) ... 113
VAŠÁTKO, J. and DANDÁR, A. Albumin decomposition and coagulation in liming. (Abs.) ... 373
et al. CO_2 hydration in sugars solutions. (Abs.) ... 283
see also DANDÁR, A. *and* SMELÍK, A.
VAVRINECZ, G. Beet molasses formation ... 90, 119
Composition of sugar factory residual material. (Abs.) ... 90
Halides and sucrose optical rotation 282, 346
VÁZQUEZ, F., *see* ZÁVORKA, J.
VEGA O., N. Chemical weed control.. 368
VEJBORA, O. *et al.* Press water treatment with micro-organisms. (Abs.) 340
VELAZCO P., A. Chemical weed control – and RUEDA R., A. Cane deterioration after harvesting. (Abs.) ... 178
VELAZQUEZ, M., *see* MACLEOD, N. A.
VELÁZQUEZ R., R. "Autofilter" operation. (Abs.) ... 343
Refinery liquor clarification. (Abs.) 343
Refining. (Abs.) ... 343
Trap filters for carbon removal from refinery liquor. (Abs.) ... 343
VELEZ R., A., *see* REYES S., E.
VELLOSO, L. P. Cane varieties in Brazil 366
VENENI, M. Soil moisture requirements for beet in Czechoslovakia. (Abs.) 51
VERCHENKO, L. M., *see* GOLUBEVA, A. D.
VERHAEGHE, H. Beet harvester. (Pat.) 349
VERKHOLA, A. P., *see* LYSYANSKII, V. M.
VERMA, A. N., *see* SINGH, B.
VERMA, I. D., *see* SINGH, R. P.
VERMES, S. Beet flume stone catchers in Hungary. (Abs.) ... 54
Reducing factory steam consumption 374
Sugar drying and cooling by fluidization. (Abs.) ... 371
VERNOIS, G. Molasses treatment by reverse osmosis. (Abs.) ... 118, 372
Waste water treatment by reverse osmosis. (Abs.) ... 23
VEROEVEREN, R. Refinery ergonomics 23
VETTER, A. and VÖLKER, W. Chemical weed control. (Abs.) ... 209
VIATOR, D. P., *see* LEGENDRE, B. L.
VICKERS, R. P. and SCHAFER, L. P. Cane deterioration control. (Abs.) 47
VIGNES, E. C. Effect of dilution on pH measurement of syrup and molasses. (Abs.) ... 152
Juice liming and pH. (Abs.) ... 147
and RANDABEL, M. Loss determination in cane milling. (Abs.) ... 147
see also DUPONT DE R. DE ST. ANTOINE, J.
VIJVAL'KO, I. G., *see* SAKALO, V. D.
VILLAVICENCIO, E. J. Bagasse paper tear strength. (Abs.) ... 379
VIROLI, G., *see* BARALDI, G.
VISCASILLAS, S. M. Conservation irrigation. (Abs.) ... 208
VISSARIONOV, M. M. and TEREGULOV, K. G. Freezing of stored beet.. 279
VITRIV, M. S., *see* MARIOTTI, J. A.
VITUKEVICH, E. P., *see* SLYUSARENKO, T. P.
VLITOS, A. J. Cane physiological and biochemical research. (Abs.) ... 174
and FEWKES, D. W. Cane research 207
see also PARKER, A. J.
VOKOUNOVÁ, L. Micro-organisms in refined sugar. (Abs.) ... 215
VÖLKER, W., *see* VETTER, A.
VOLOSHANENKO, G. P. and BOBROVNIK, L. D. Organic acids determination in dialysates. (Abs.) ... 250
et al. Green syrup organic acids determination. (Abs.) ... 153

PAGE

VOLOSHIN, Z. S. Juice filtration rate determination. (Abs.) ... 213
VON BOGUSLAWSKI, E. and SCHILDBACH, R. Beet growing trials. (Abs.).. 51
VON DER LINDE, H. J. and HABERICH, W. Liquid sugar production from cane molasses. (Pat.) ... 317
VON LIPPMANN, E. O. History of sugar 344
VON MÜLLER, A. and WINNER, C. Effect of covering on beet seed emergence and growth. (Abs.).. 19
VON PROSKOWETZ, W. Heat losses.. 54
"Kobilt" active carbon. (Abs.).... 281
VORONA, L. G. and ZHURA, K. D. Colour removal with granular carbon. (Abs.) ... 153
et al. Juice level and CO_2 utilization in carbonatation. (Abs.) ... 279
VORONKOVA, I. N., *see* SAFRONOV, A. R.
VRÁTNÝ, P. Sugars separation by column chromatography. (Abs.).. 251
VUKOV, K. Sucrose diffusion constant 251
VYAZNIKOV, A. K. *et al.* Cane harvester (Pat.) ... 157, 316

WAGENET, J. M. Steel properties and uses. (Abs.) ... 85
WALERIAŃCZYK, E. Beet diffuser corrosion prevention. (Abs.) ... 374
WALKER, D. A. Sucrose synthesis in green plants. (Abs.) ... 205
WALKER, J. M. Cane smut. (Abs.).. 13
WALLENSTEIN, H. M. and NORSEN, H. Wedge wire screens. (Abs.) ... 343
WALLIS, R. L. and TURNER, J. E. Beet varietal resistance to aphis.. 18
WANG, C. S. Cane ratoon stunting in Taiwan. (Abs.) ... 13
WARNE, D. E., *see* HOWES, A. M.
WARRIER, W. S. Indian sugar technology. (Abs.) ... 244
WATTIEZ, S., *see* BONNEMAISON, L.
WAYMAN, J. A. and MAUGHAN, G. L. Beet harvester speed and topping 242
WEATHERSPOON, D. M., *see* SCHWEIZER, E. E.
WEAVER, W. H., *see* JAMES, D. W.
ERNEST A. WEBB LTD. Beet cleaner 60
WEBBER, H. D. Cane railway curve adjustment. (Abs.) ... 53
WEBBR, M., *see* LAUER, K.
WEICHEL, E. Beet harvester. (Pat.).. 122
WEILANDT, W. Bulk storage. (Abs.) 311
WELLENHOFER, K., *see* HARTL, H.
WELLS, N. E. Beet harvester row finder. (Pat.) ... 187
WERTÁN, P., *see* HANGYÁL, K.
WESTERN CONVEYOR CO., *see* BURNS, R. N.
WHELLAN, J. A. Cane damage by locusts. (Abs.) ... 79
WHITE, E. T., *see* MACKINTOSH, D. L. *and* WRIGHT, P. G.
WHITTEMORE, H. D., *see* CLAYTON, J. E.
WIKKLUK, M. Evaporator tube silicone treatment. (Abs.) ... 54
WIENINGER, L. Amino-nitrogen determination in beet. (Abs.) ... 313
and KUBADINOW, N. Comparison of laboratory carbonatation with factory results. (Abs.) ... 313
– Topping effect on beet quality.. 310
see also KUBADINOW, N.
WIGAND, P. Beet cossette slicers. (Abs.) 148
WILLETT, H. A. Mechanical harvesting in Puerto Rico. (Abs.) ... 207
WILLEY, L. A. Beet varietal trials in UK. (Abs.) ... 143
Bolting of beet varieties. (Abs.).. 19, 337
and MCCULLAGH, S. F. H. Beet varietal trials in UK. (Abs.).... 112
WILLIAMS, E. S. Overhead irrigation and mole drainage at Aguirre .. 239
Overhead irrigation in Puerto Rico 174
WILLIAMS, F. M. Refinery liquor decolorization with granular carbon 181
WILLIAMS, J. C. and LOUDON, T. R. Cane payment and delivery in South Africa. (Abs.) ... 178, 206
see also PARKER, K. J.
WILLIS, M. B., *see* ELIAS, A., MACLEOD, N. A., MARTIN, J. L, PEREZ, R. *and* PRESTON, T. R.

PAGE

WILLISON, W. A., *see* BLANKENBACH, W. W.
WILSON, G. Frenchi grub head widths Ground pearls. (Abs.) ... 16
see also HIBBERT, D.
WINCHESTER, J. A. Nematocide trials in Florida. (Abs.) ... 81
WINDAL, G., *see* DAMBRINE, F.
WINNER, C. and SCHÄUFELE, W. R. Beet fungal root damage detection 18
see also NEEB, O., SCHÄUFELE, W. R. *and* VON MÜLLER, A.
WISMER, C. A. Cane leaf scald resistance testing in Hawaii. (Abs.).. 81
WOLAŃSKI, J., *see* SOLTYSIAK, J.
WOLF, A., *see* SCHLIEPHAKE, D. *and* SCHNEIDER, F.
WÖLLER, L., *see* HANGYÁL, K.
WONG, R. and ARGÜELLES, R. Critical Path Planning. (Abs.) ... 243
WOOD, D. R., *see* BILGEN, T.
WOOD, R. A. Effect of cane root C:N ratio on soil nitrogen availability 49
WOOLLEN, A. Food industries manual 182
WRIGHT, D. J. Cane mill hydraulic drives. (Abs.) ... 53
WRIGHT, E. W., *see* ZAGORSKI, J. J.
WRIGHT, J. Nitrogen fertilizer trials in Australia. (Abs.) ... 16
WRIGHT, P. G. and WHITE, E. T. Crystal size distribution in massecuite. (Abs.) ... 89
WRUSS, W. Iron determination in beet juice. (Abs.) ... 314
WU, H. S. By-products utilization in Taiwan. (Abs.) ... 121
WULF, T. E., *see* BURNS, R. N.
WULFINGHOFF, M. Disposal of process wastes. (N.B.) ... 26

XUAN, V. T. and SAMANIEGO, R. Bagasse storage and utilization.. 315

YABLONOVSKII, V. D., *see* POLYAK, M. L.
YAKIMENKO, I. A. Beet seed productivity. (Abs.) ... 209
YAKIMENKO, N. S. Beet varieties in USSR. (Abs.) ... 51, 113
YAMAGUCHI, A., *see* KAJIYAMA, T.
YAMAMOTO, K., *see* SUGAWARA, M.
YAMANE, T. Japan refineries. (Abs.) 88
et al. Affined sugar decolorization.. 342
YAN'SHIN, A. P., *see* KAMINSKII, G. A.
YATES, R. A. Cane ripening. (Abs.).. 174
YMSON, L. Bulk handling in Philippines 211
YOON, C. N. and KOK, C. A. Nitrogen effect on cane. (Abs.) ... 14
YUSUF, N. D., *see* AHMAD, H., GORSI, A. M., JABBAR, A., MALUKARA, A. M. *and* MUHAMMAD, W.

ZABATA C., J. Mechanical harvesting trials in Puerto Rico. (Abs.).... 208
ZABORSIN, A. F., *see* SHEVTSOV, D. S.
ZAGORSKI, J. J. and WRIGHT, E. W. Cane harvester reversible topper.. 316
ZAGORUL'KO, A. Y. and KOROBEINIKOVA, L. A. Refined and white sugar colour determination .. 119, 377
and PONOMARENKO, A. A. Optically-active matter determination in beet and cossettes. (Abs.) ... 153
et al. Beet and sugar loss calculation 372
see also SHIRING, E. R. *and* ZAMBROVSKII, V. A.
ZAGRODZKI, S. Non-sugars and colorant effects on boiling time. (Abs.).. 280
and DOBRZYCKI, J. Automatic pH control in carbonatation. (Abs.).. 371
and ZAORSKA, H. Swedish sugar industry. (Abs.) ... 118
et al. Juice and liquor treatment with active carbon. (Abs.) ... 55
see also ZAORSKA, H.
ZAGRODZKI, S. M., *see* ZAGRODZKI, S.
ZAHRADNÍČEK, J., *see* HAVRÁNEK, A.
ZAJAC, P., *see* MIAGKOV, O.

INDEX

PAGE

ZAJAROVA, M. D., *see* KARA-MURZA, S.
ZAKHARIEV, A. *et al.* Beet seed polishing 51
ZAKHAROV, K. P. *et al.* Green syrup ion exchange treatment and betaine loss. (Abs.) 92
ZAMBROVSKII, V. A. *et al.* BOU-40 vacuum filters. (Abs.) 55
– FPAKM plate-and-frame filter 341
– Filter. (Abs.) 213
– Filter cake sweetening-off. (Abs.) 246
ZAMECSNIK, L., *see* FEKETE, L.
ZANCHE, C. D. Mechanical beet thinners 307
ZAORSKA, H. and ZAGRODZKI, S. Evaporator juice level and colour 215, 217
– Liming temperature and evaporator juice colour. (Abs.) 280
see also ZAGRODZKI, S.
ZÁVORKA, J. *et al.* Juice level and Brix and evaporator heat transfer 211
ZDÁRSKÝ, J. Effects of downy mildew on beet. (Abs.) 152

PAGE

ZELIKMAN, I. F. *et al.* Thick juice electrodialysis. (Abs.) 23
see also BRENMAN, S. A.
ZENDE, G. K. Manganese sulphate as cane fertilizer. (Abs.) 273
ZHADAN, V. Z. *et al.* Loss reduction in stored beet with moist air. (Abs.) 87
ZHALOV, B. S. Pipeline installation and maintenance. (Abs.) 179
ZHIGAILO, M. I. Beet varietal resistance to rotting in storage. (Abs.) 55
ZHIZHINA, R. G. *et al.* Carbonatation 22
ZHMYRYA, L. P. *et al.* Molecular diffuson in sucrose solution. (Abs.) 250
ZHURA, K. D., *see* KOZYAVKIN, A. P., MISHCHUK, R. T., OLYANSKAYA, S. P., TREBIN, L. I. *and* VORONA, L. G.
ZIEGLER, J. G. Automatic boiling control. (Abs.) 114
Sealed-downtake evaporators. (Abs.) 146

PAGE

ZIEVERS, J. F. and NOVOTNY, C. J. Ion exchange. (Abs.) 181
ZINGEL', Z. Beet flume-wash water treatment. (Abs.) 372
ZLAMAN, V. V. Milk-of-lime dosing 22
Raw juice proportioning meter 22
Soluble calcium salts determination in beet juice. (Abs.) 377
ZOBNIN, P. V. *et al.* Buckau-Wolf automatic centrifugal. (Abs.) 213
ZUBCHENKO, A. V. and CHERPAKOV, V. P. Sucrose crystallization rate determination. (Abs.) 313
and KHARIN, S. E. Sucrose crystallization rate calculation. (Abs.) 346
et al. Boiling thermograms. (Abs.) 250
ZUCCHI, F., *see* TRABANELLI, G.
ZUR, M., *see* GUTSTEIN, Y.
ZVEREVA, T. S., *see* SAPRONOV, A. R.
ZVORYKIN, V. V. *et al.* White sugar drying and cooling. (Abs.) 179